

PD723 & PD725
Service Guide

Service guide files and updates are available
on the AIPG/CSD web; for more information,
please refer to <http://csd.acer.com.tw>

Revision History

Please refer to the table below for the updates made on PD723 & PD725 service guide.

Date	Chapter	Updates

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Conventions

The following conventions are used in this manual:

Screen Message	Denotes actual messages that appear on screen.
NOTE	Gives bits and pieces of additional information related to the current topic.
WARNING	Alerts you to any damage that might result from doing or not doing specific actions.
CAUTION	Gives precautionary measures to avoid possible hardware or software problems.
IMPORTANT	Reminds you to do specific actions relevant to the accomplishment of procedures.

Preface

Before using this information and the product it supports, please read the following general information.

1. This Service Guide provides you with all technical information relating to the BASIC CONFIGURATION decided for Acer's "global" product offering. To better fit local market requirements and enhance product competitiveness, your regional office MAY have decided to extend the functionality of a machine (e.g. add-on card, modem, or extra memory capability). These LOCALIZED FEATURES will NOT be covered in this generic service guide. In such cases, please contact your regional offices or the responsible personnel/channel to provide you with further technical details.
2. Please note WHEN ORDERING FRU PARTS, that you should check the most up-to-date information available on your regional web or channel. If, for whatever reason, a part number change is made, it will not be noted in the printed Service Guide. For ACER-AUTHORIZED SERVICE PROVIDERS, your Acer office may have a DIFFERENT part number code to those given in the FRU list of this printed Service Guide. You MUST use the list provided by your regional Acer office to order FRU parts for repair and service of customer machines.

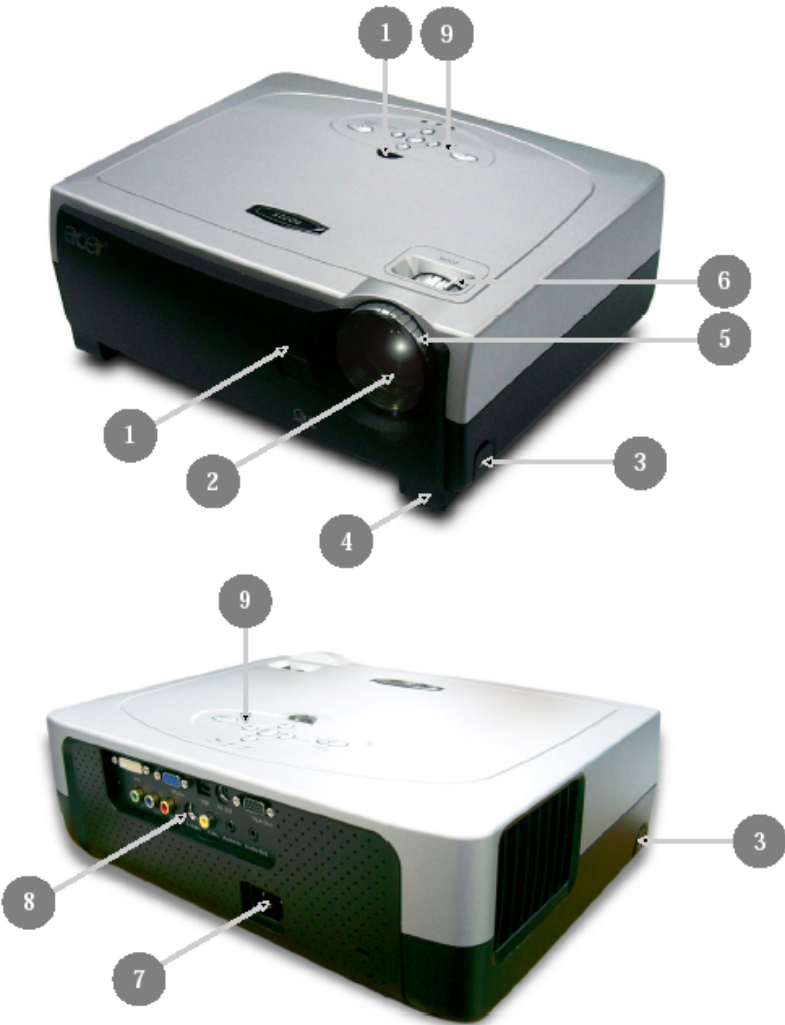
System Introduction

Technical Specification

Item	Model	Description
Dimensions (WxHxD)	PD725	Inner dimension 335 x 250 x 100 (mm)
	PD723	Inner dimension 330 x 269 x 100 (mm)
Weight	PD725	Approx. 8 lbs
	PD723	Approx. 7.5 lbs
Tilt Angle	PD723/725	7 degree with elevator mechanism
Keystone correction	PD723/725	+/-16 degree (32 degree)
Lamp Door Projection	PD723/725	Lamp power supply shut off automatically when door open
Power Supply	PD725	Universal AC 100-240V 50/60 Hz with PFC input Used OSRAM P-VIP 300/1.3 E21.8 300W Lamp
	PD723	Universal AC 100-240V 50/60 Hz with PFC input Used Philip E21.8 250W Lamp
Power Consumption	PD723/725	384W Typ. @ 110V AC Standby mode < 10 Watt @ 110V AC
Projection Lens	PD725	F/2.2-2.6 ; f24.5-29.4 : 1.2x
	PD723	F/2.4-2.6 ; f28-33.6 : 1.2x
Projection Distance	PD723/725	1.2m-12m
Brightness	PD725	Specification : 3000 Lumens Typical output : 2600 Lumens Minimum : 2210 Lumens
	PD723	Specification : 2600 Lumens Typical output : 2250 Lumens Minimum : 1910 Lumens
Contrast Ratio	PD725	Specification : 1500 : 1 full on / full off Typical output : 1300 : 1 Minimum : 1000 : 1 full on / full off
	PD723	Specification : 2000 : 1 full on / full off Typical output : 1800 : 1 Minimum : 1200 : 1 full on / full off
Uniformity	PD725	Specification : 85%
	PD723	Specification : 85% (JBMA)
Temperature	PD723/725	Operating : 5~35°C Storage : -20~60°C
Color Temperature	PD723/725	7500°K adjustable from 6500°K-9500°K

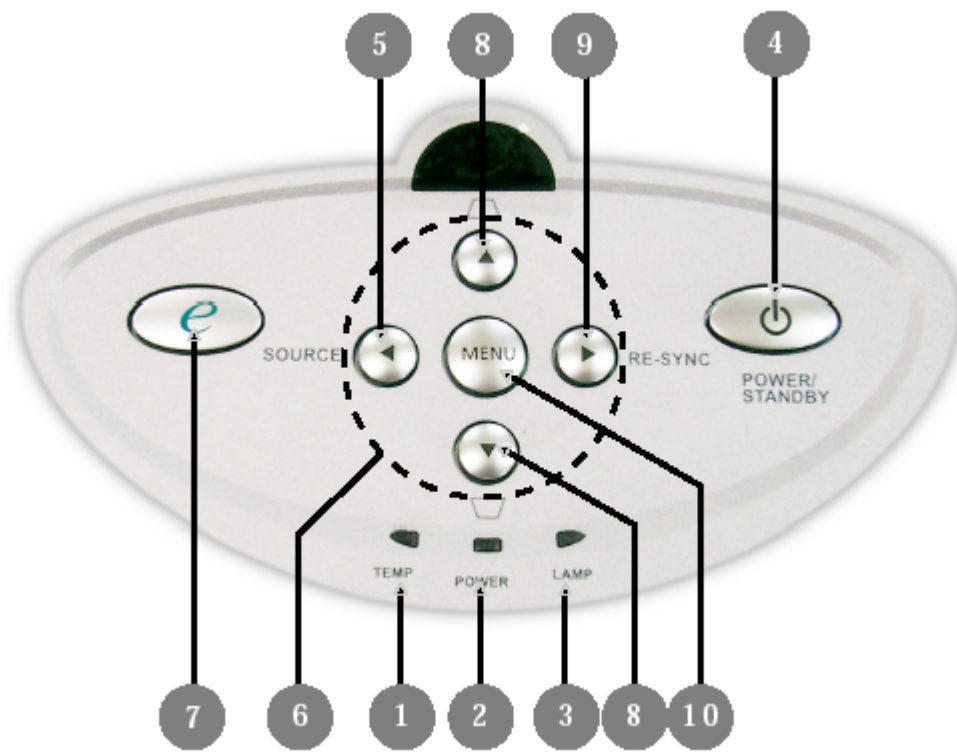
Product Overview

Main Unit



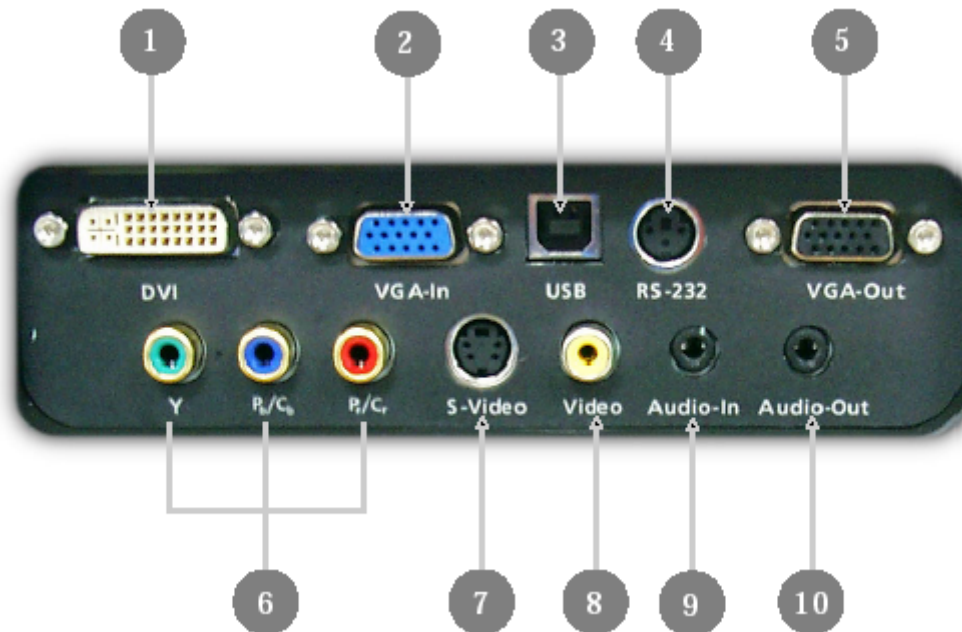
Item	Description
1	Remote Control Receiver
2	Zoom Lens
3	Elevator Button
4	Elevator Foot
5	Focus Ring
6	Zoom Ring
7	Power Socket
8	Connection Ports
9	Control Panel

Panel Control



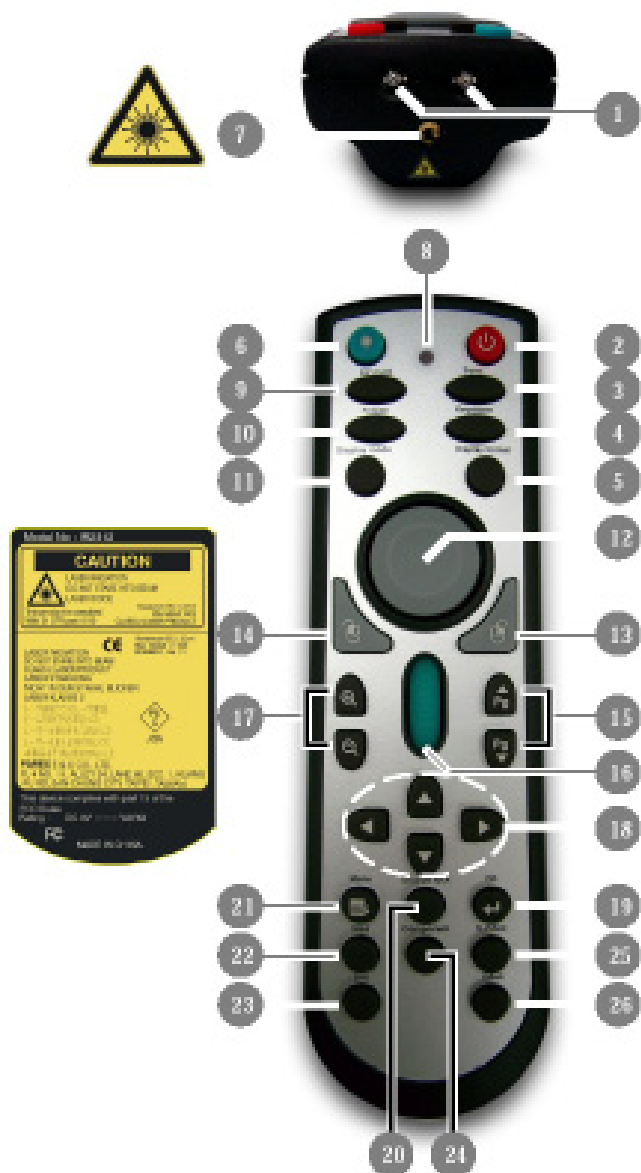
Item	Description
1	Temp Indicator LED
2	Power Indicator LED
3	Lamp Indicator LED
4	Power / Standby
5	Source
6	Four Directional Select Keys
7	Display Mode
8	Keystone Correction
9	Re-sync
10	Menu

Connection Ports



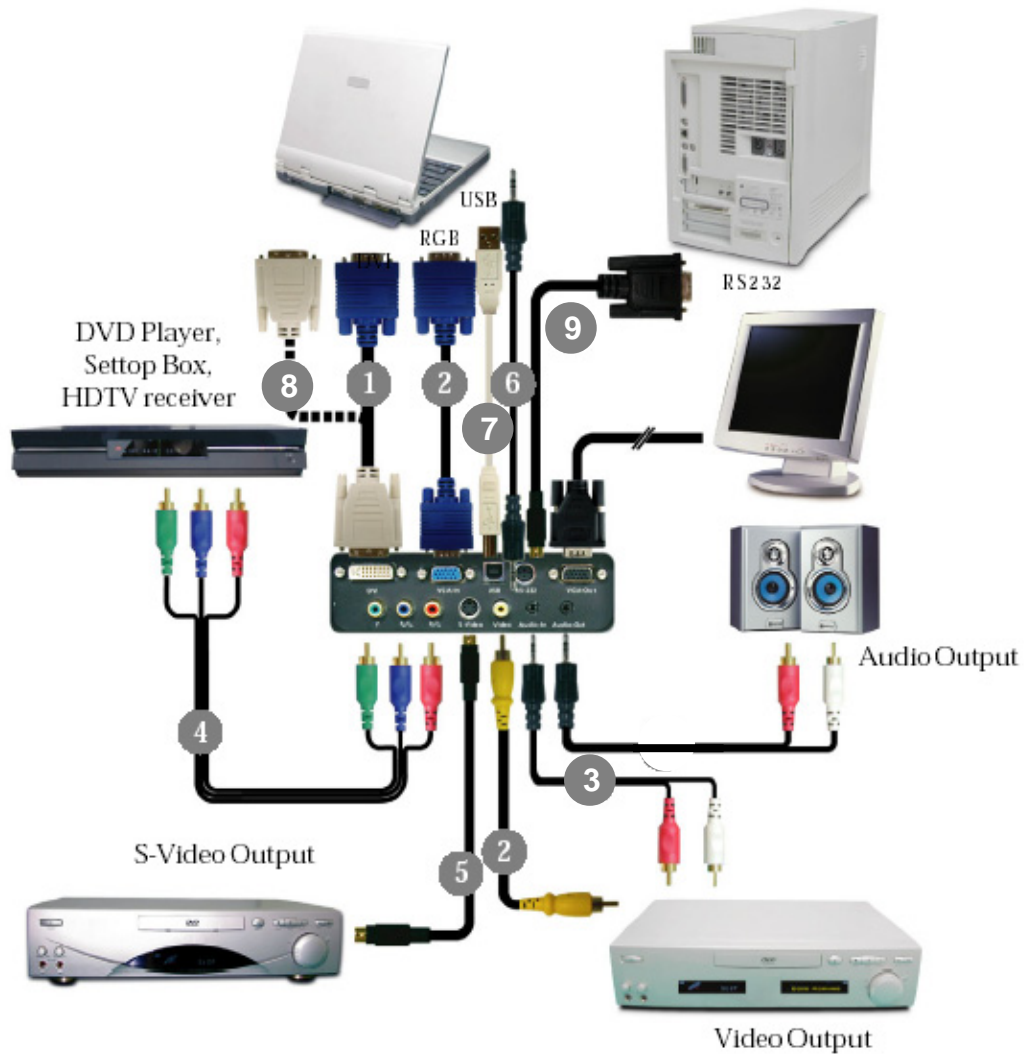
Item	Description
1	DVI Input Connector (PC Digital and Analog signal / HDTV / HDCP / Component Video Input)
2	VGA Connector (PC Analog Signal / HDTV / Component Video Input)
3	USB Input Connector
4	RS232 Input Connector
5	Monitor Loop-through Output Connector
6	Component Video Input Connector
7	S-Video Input Connector
8	Composite Video Input Connector
9	Audio Input Connector
10	Audio Output Connector

Remote Control with Mouse Function & Laser Pointer



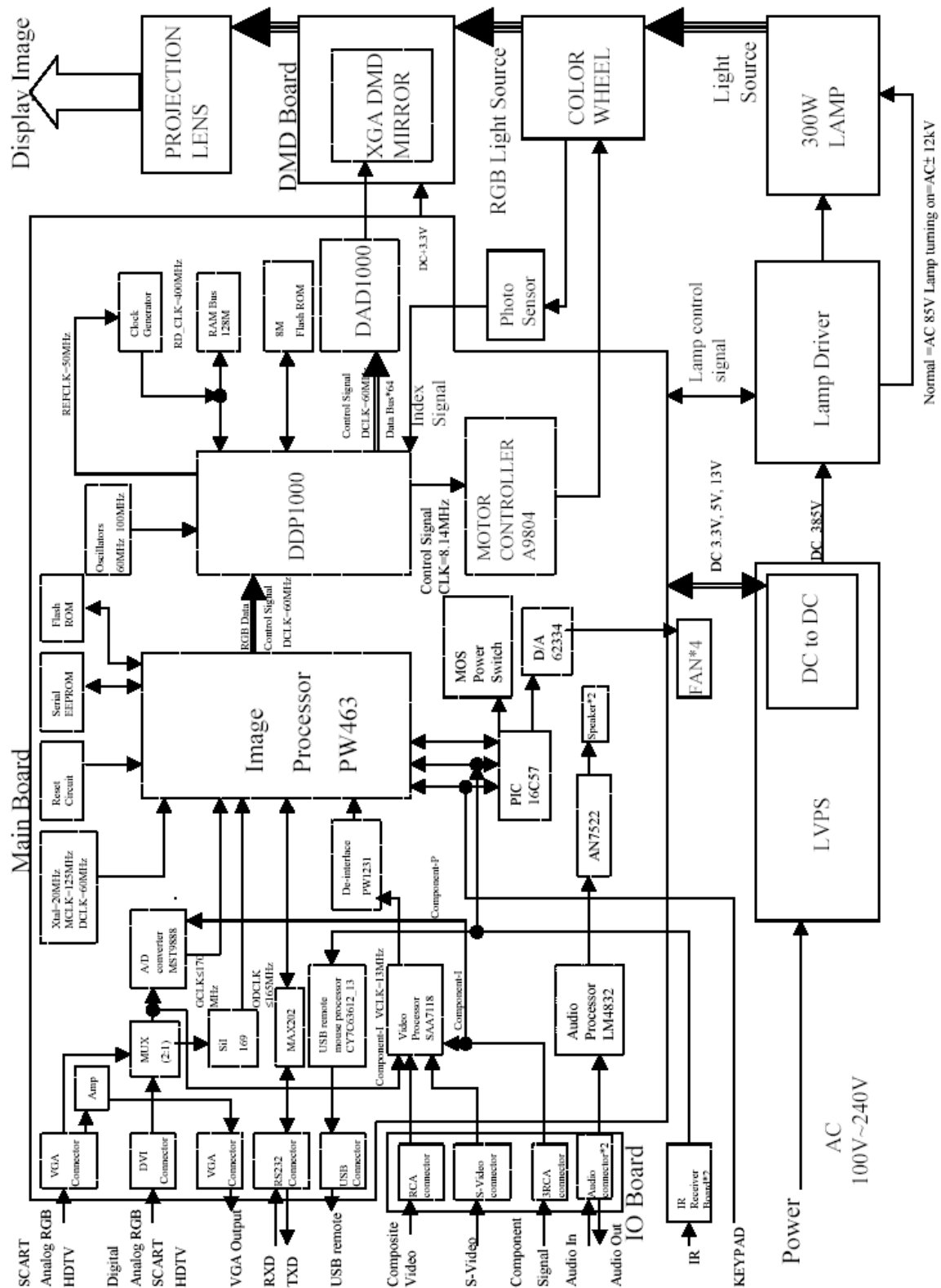
Item	Description
1	IR LEDS
2	Power
3	Sync
4	Keystone Correction
5	Display Format
6	Laser Button
7	Laser Pointer
8	Laser Indicator LED
9	A/V Mute
10	Freeze
11	Display Mode
12	Mouse
13	Mouse Right Click
14	Mouse Left Click
15	Page Up / Page Down
16	Page Scrolling
17	Zoom In / Zoom Out
18	Four Directional Select Keys
19	OK (Enter)
20	Source Lock
21	Menu
22	VGA Source
23	DVI Source
24	Component Video Source
25	S-Video Source
26	Composite Video Source

Connecting the Projector



Item	Description
1	DVI to D-Sub Cable
2	VGA Cable
3	Composite Video Cable
4	3 RCA Component Cable
5	S-Video Cable
6	Audio Cable Jack / Jack
7	USB Cable
8	DVI to DVI Cable (Optional Accessory)
9	RS232 Cable (Optional Accessory)

System Block Diagram



Firmware Upgrade

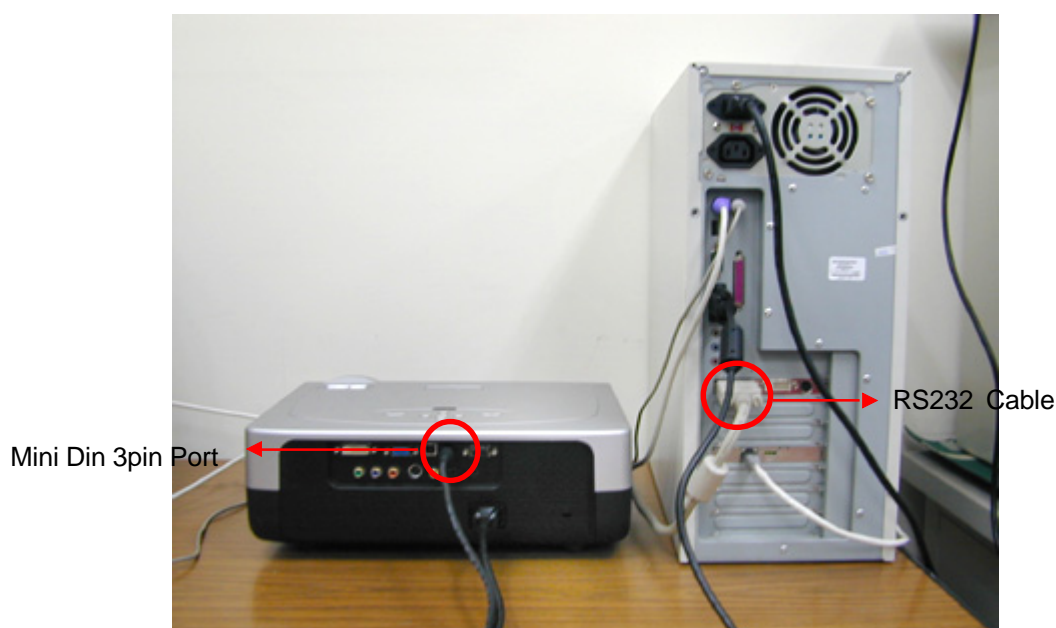
This chapter provides the equipment needed, setup and upgrading procedure for Firmware upgrade.

Equipment Needed

Item	Description
Software	Config.hex
	Flasher.hex
	FlashUpgrader.exe
	Gui.exe
	Pixelware.inf
	Romcode.hex
Hardware	Power Cord
	Cable RS232 To Mini Din 3 Pin
	PC or Laptop
	PD723/725 Projector

Setup Procedure

1. Connect RS232 Cable between PC and PD723/725 Projector.

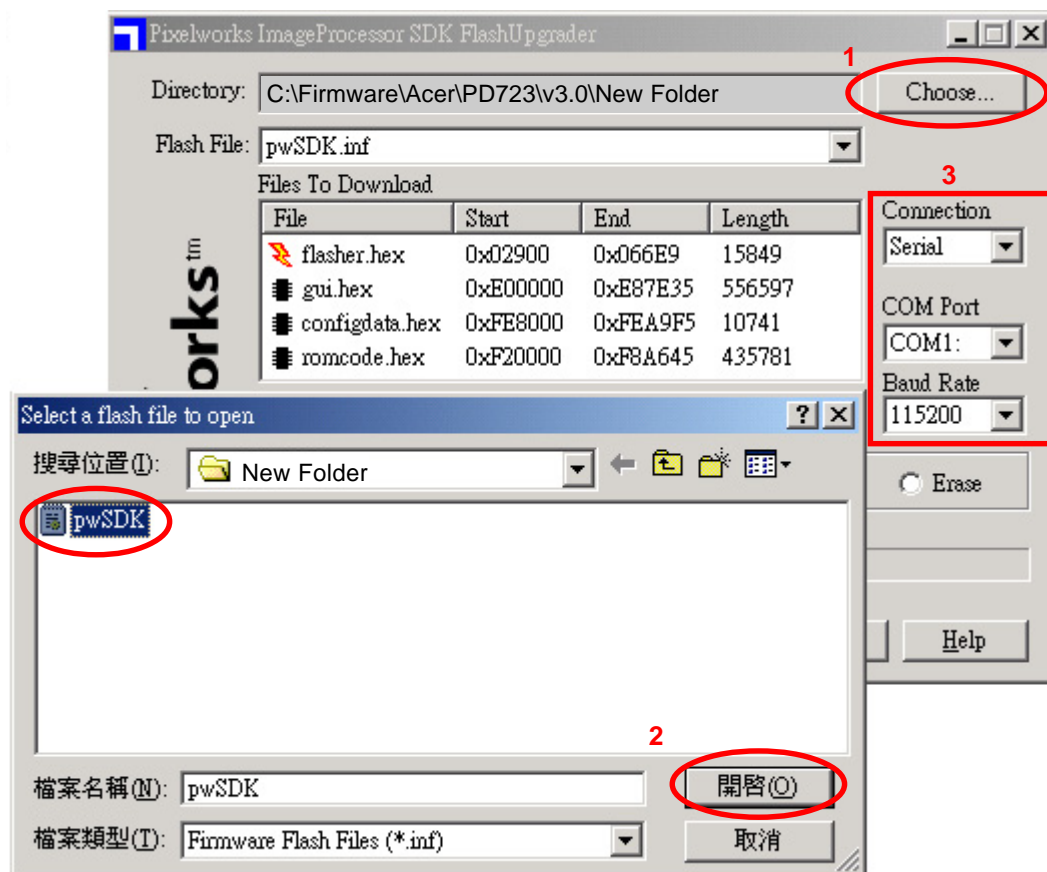


Installation Procedure

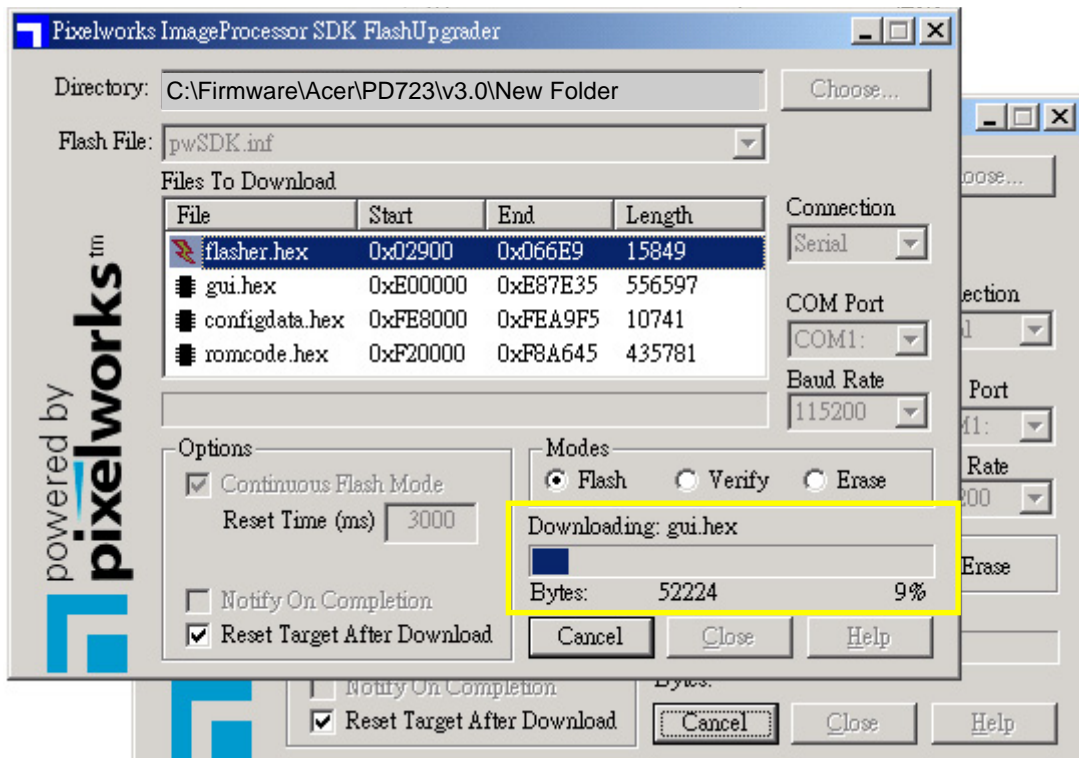
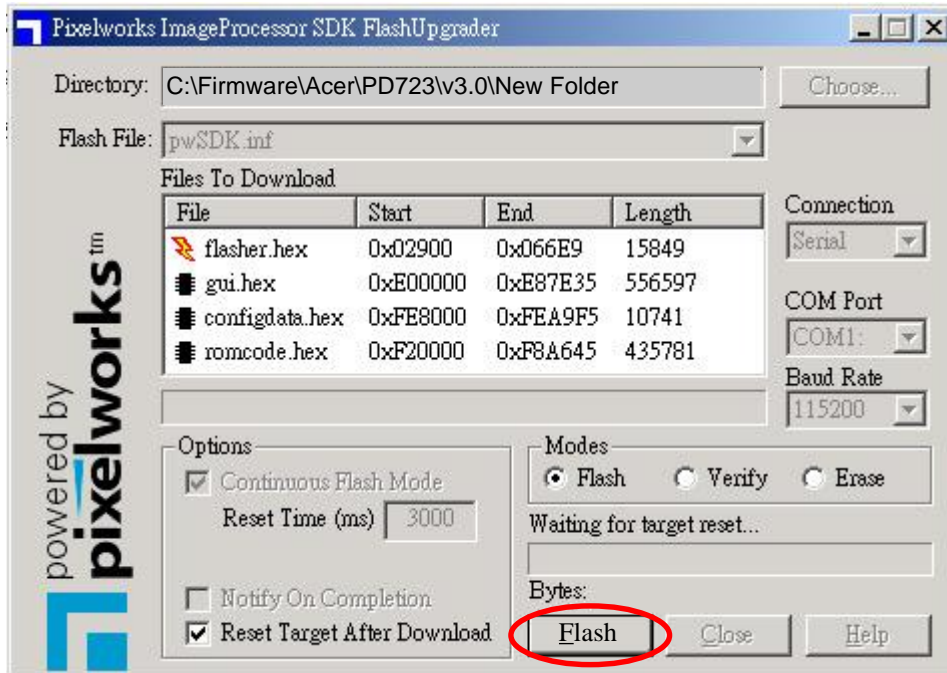
1. Execute the “FlashUpgrader.exe” program.

名稱	大小	類型	修改日期
configdata.hex	29 KB	HEX 檔案	2004/6/16 下午 07:04
flasher.hex	44 KB	HEX 檔案	2004/5/25 下午 05:39
FlashUpgrader	320 KB	應用程式	2003/6/21 下午 10:09
gui.hex	1,495 KB	HEX 檔案	2004/6/17 下午 06:10
pwSDK	2 KB	安裝資訊	2002/11/8 上午 09:06
romcode.hex	1,203 KB	HEX 檔案	2004/6/17 下午 06:12

2. Click “Choose” to get the file directory.
3. Select <pwSDK.inf> file and open it.
4. Select the Serial port in Connection field, COM1 : in COM Port field and 115200 in Baud Rate field.



- Click “Flash” to start the firmware upgrade procedure and keep press the projector’s power button immediately until download “gui.hex” to 10%.



- After downloading all files, enter the service mode to check the F/W version.

*Note

Note : Press “Power”, “Up”, “Down”, “Right” button, and then enter the service mode to check the F/W version.

EDID Upgrade

This chapter provides the equipment needed, setup and upgrading procedure for EDID upgrade.

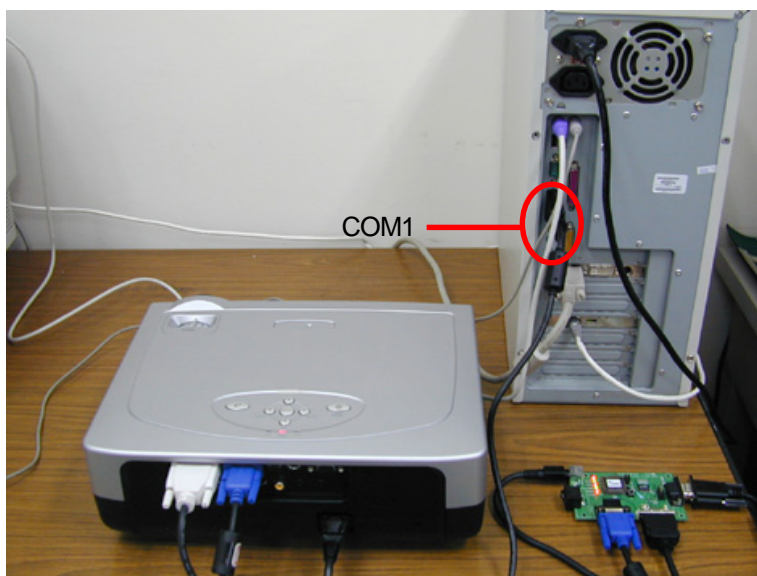
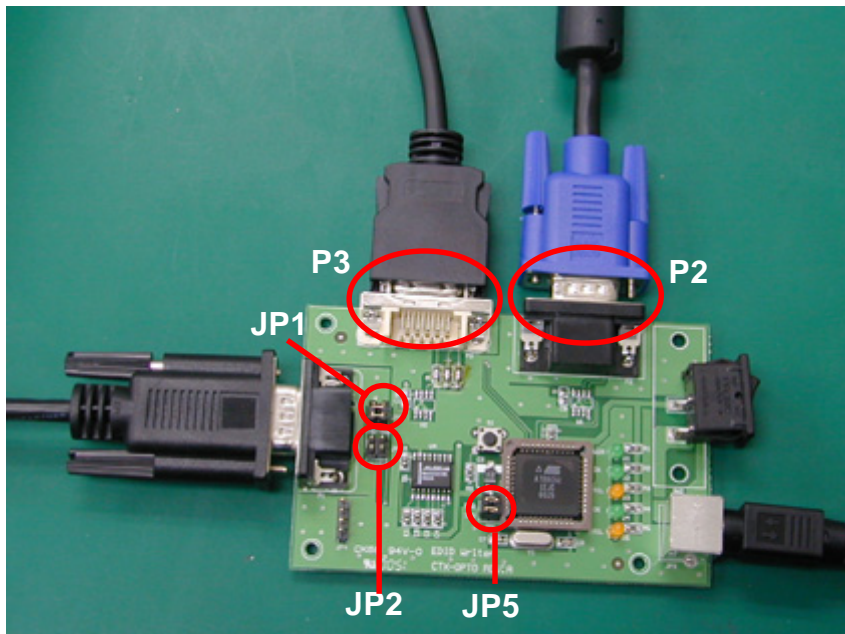
Equipment Needed

Item	Description
Hardware	PC or Laptop (OS : Windows 98 / ME)
	EDID Fixture
	DFP to DVI Cable
	Power Adapter
	RS-232 Cable
	VGA Cable
	Power Cord
	DDC Driver
	PD723/725



Setup Procedure

1. Connect Power Adapter with fixture.
2. Make sure the JP1 and JP5 is close and JP2 is open.
3. Connect P2 of the fixture with VGA Port of PD723/725 by the VGA Cable.
4. Connect P3 of the fixture with DVI Port of PD723/725 by the DFP to DVI Cable.
5. Turn on the power of the fixture.



DDC Key-in Procedure

A. Analog

1. Execute PD723 or PD725 EDID_B program.
2. Make sure the COM port is connecting ok.
3. Choose the “Analog” to do the Analog DDC procedure.

Bar Code :

Serial Number :

Week :

On Line :

Year :

Product ID :

Product Name : PD723/PD725

☐ COM1

☒ COM2

☒ Analog

☐ Digital

Link OK

C0	FF	FF	FF	FF	FF	00	3C	00	39	35	00	00	00	00
C1	0E	01	03	6F	00	00	0A	1C	43	A4	57	4B	A8	26
CC	49	4E	AF	EF	00	31	59	45	59	61	59	71	4F	81
E1	99	A9	4C	01	01	64	19	08	40	41	00	26	30	18
36	00	00	0C	00	00	00	18	08	00	00	FF	00	20	20
20	20	20	2C	20	20	20	28	0A	00	00	00	P9	00	2B
78	1E	64	11	00	0A	20	28	20	20	20	00	00	00	FC
C0	4F	70	74	6F	6D	61	20	45	50	37	35	39	0A	00

C0	FF	FF	FF	FF	FF	00	3C	00	39	35	00	00	00	00
C1	0E	01	03	6F	00	00	0A	1C	43	A4	57	4B	A8	26
CC	49	4E	AF	EF	00	31	59	45	59	61	59	71	4F	81
E1	99	A9	4C	01	01	64	19	08	40	41	00	26	30	18
36	00	00	0C	00	00	00	18	08	00	00	FF	00	20	20
20	20	20	2C	20	20	20	28	0A	00	00	00	P9	00	2B
78	1E	64	11	00	0A	20	28	20	20	20	00	00	00	FC
C0	4F	70	74	6F	6D	61	20	45	50	37	35	39	0A	00

4. Key-in S/N into the blank beside Barcode, and then press “Enter” key on the keyboard to begin programming.

Bar Code : 081Y25189315601

Serial Number :

Week :

On Line :

Year :

Product ID : 081Y (PD723) / 081N (PD725)

Product Name : PD723/PD725

☐ COM1
☒ COM2

☒ Analog
☐ Digital

Link OK

Link Test

00	FF	FF	FF	FF	FF	FF	00	3C	00	39	35	00	00	00	00
01	0E	01	03	6F	00	00	00	0A	1C	43	A4	57	4B	A8	26
0C	49	4E	AF	EF	80	31	59	45	59	61	59	71	4F	81	80
81	99	A9	40	01	01	64	19	00	40	41	00	26	30	18	88
36	00	00	00	00	00	00	18	00	00	00	FF	00	20	20	20
20	20	20	20	20	20	20	20	20	0A	00	00	00	FD	00	2B
78	1E	64	11	00	0A	20	20	20	20	20	20	00	00	00	FC
00	4F	70	74	6F	6D	61	20	45	50	37	35	39	0A	00	90

5. After finishing the above action, “PASS” message will appear on the screen.

Bar Code :

Serial Number : 1234

Week : 42

On Line :

Year : 2004

Manu. ID : 081Y (PD723) / 081N (PD725)

Product : PD723/PD725

☒ COM1
☐ COM2

☒ Analog
☐ Digital

Link OK

Link Test

00	FF	FF	FF	FF	FF	FF	00	3C	00	39	35	D2	04	00	00
2A	0D	01	03	6F	00	00	00	0A	1C	43	A4	57	4B	A8	26
0C	49	4E	AF	EF	80	31	59	45	59	61	59	71	4F	81	80
81	99	A9	40	01	01	64	19	00	40	41	00	26	30	18	88
36	00	00	00	00	00	00	18	00	00	00	FF	00	4F	38	39
36	33	34	32	54	31	32	33	34	0A	00	00	00	FD	00	2B
78	1E	64	11	00	0A	20	20	20	20	20	20	00	00	00	FC
00	4F	70	74	6F	6D	61	20	45	50	37	35	39	0A	00	31

VGA PASS

00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00
00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00
00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00
00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00
00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00
00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00
00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00
00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00

B. Digital

1. Make sure the COM port is connecting ok.
2. Choose the “Digital” to do the Digital DDC procedure.

Bar Code :

Serial Number :

Week :

On Line :

Year :

Manu. ID : 081Y (PD723) / 081N (PD725)

Product : PD723/PD725

☒ COM1

☐ COM2

☐ Analog

☒ Digital

Link OK

Link Test

3. Key-in S/N into the blank beside Barcode, and then press “Enter” key on the keyboard to begin programming.

Bar Code : 081Y25189315601

Serial Number :

Week :

On Line :

Year :

Manu. ID : 081Y (PD723) / 081N (PD725)

Product : PD723/PD725

☒ COM1

☐ COM2

☐ Analog

☒ Digital

Link OK

Link Test

4. After finishing the above action, "PASS" message will appear on the screen.

The screenshot shows a software interface for a DVI link test. On the left, there are input fields for 'Bar Code', 'Serial Number : 1234', 'Week : 22', 'On Line :', 'Year : 2004', 'Product ID : 081Y (PD723) / 081N (PD725)', and 'Product Name : PD723/PD725'. Below these are radio buttons for 'COM1', 'COM2', 'Analog', and 'Digital'. A 'Link Test' button is at the bottom left. On the right, there are two hex grids. The top grid is mostly red '00's. The bottom grid contains various hex values, with some in blue. In the center, the text 'DVI PASS' is displayed and circled in red. Below this text is a row of 16 blue squares.

00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00
00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00
00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00
00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00
00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00
00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00
00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00

00	FF	FF	FF	FF	FF	FF	00	3C	00	39	35	D2	04	00	00	
16	0E	01	03	80	00	00	00	0A	1C	43	A4	57	4B	A8	26	
0C	49	4E	AF	EF	80	31	59	45	59	61	59	71	4F	81	80	
81	99	A9	40	01	01	64	19	00	40	41	00	26	30	18	88	
36	00	00	00	00	00	00	18	01	1D	80	18	71	1C	16	20	
58	2C	25	00	20	C2	31	00	00	9E	00	00	00	FD	00	2B	
78	1E	64	11	00	0A	20	20	20	20	20	20	20	00	00	00	FC
00	4F	70	74	6F	6D	61	20	45	50	37	35	39	0A	00	16	



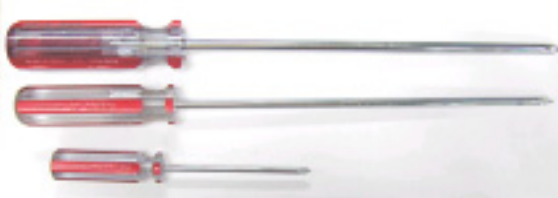
DVI PASS

Link Test

Machine Disassembly and Replacement

This section provides disassembly procedures for PD723/725 Micro Portable XGA DMD Projector. Before you begin any of these procedures, be sure to turn off the power, computer system, and other attached devices; then disconnect the power cable from the electrical outlet. Moreover, when you disassemble the projector, be sure to put the screws in a safe place and separate them according to their category.

Tool Needed

Item	PHOTO
Long Nose Nipper (Left) Angle Cutting Nipper (Right)	
Hex Sleeves 5mm (Top) Screw Bit (-) 101 Wrench #8	
Screw Bit (+) : 107, 102, 101 (from top to bottom)	

General Information

Before You Begin

Before proceeding with the disassembly procedure, make sure that you do the following procedures:

1. Turn off the power of the system and all the peripherals.
2. Unplug the AC adapter and all power and signal cables from the system.
3. Anti-static wrist strap.

The Front Side

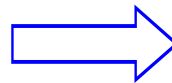
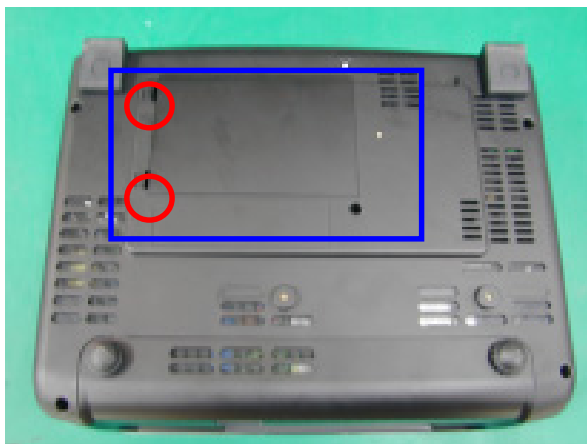


The Rear Side



Disassemble Lamp Module and Elevator Foot

1. Turn unit to bottom side. Remove Lamp Cover and unscrew three screws to pull out Lamp Module.

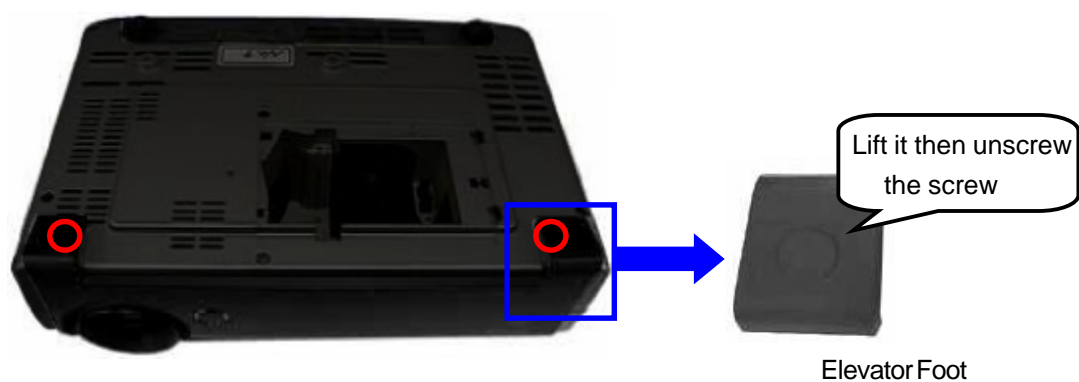


Lamp Cover



Lamp Module

-
2. Unscrew two screws to detach the Elevator Foot from Bottom Housing.

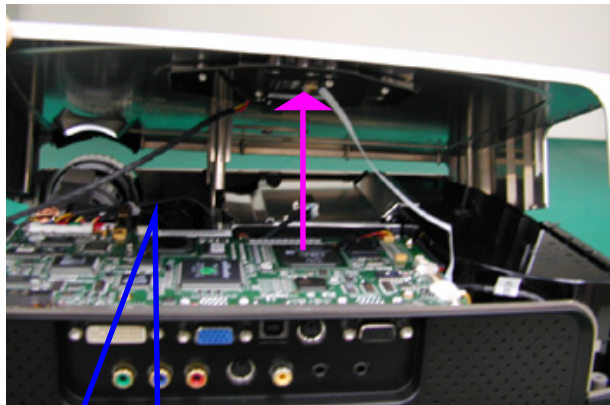


Disassemble Top Cover, Front Cover, Keypad Board and IR Sensor Module

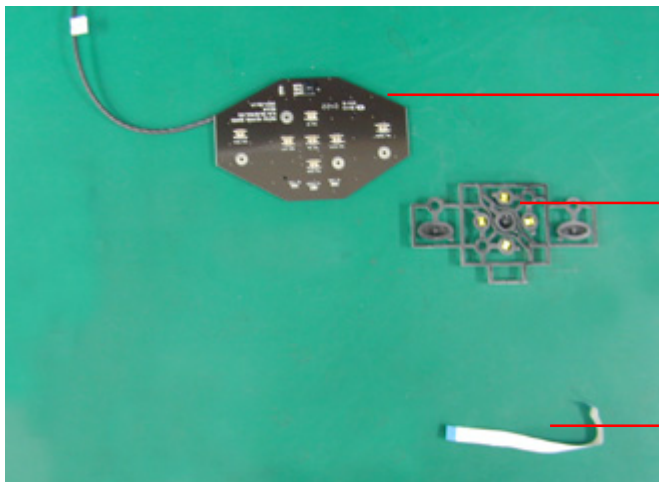
1. Unscrew eight screws and then turn the unit to the top side to lift Top Cover.



2. Unplug three wires to separate Top Cover from the main unit.



-
3. Unscrew 4 screws to remove Keypad and Keypad Board.



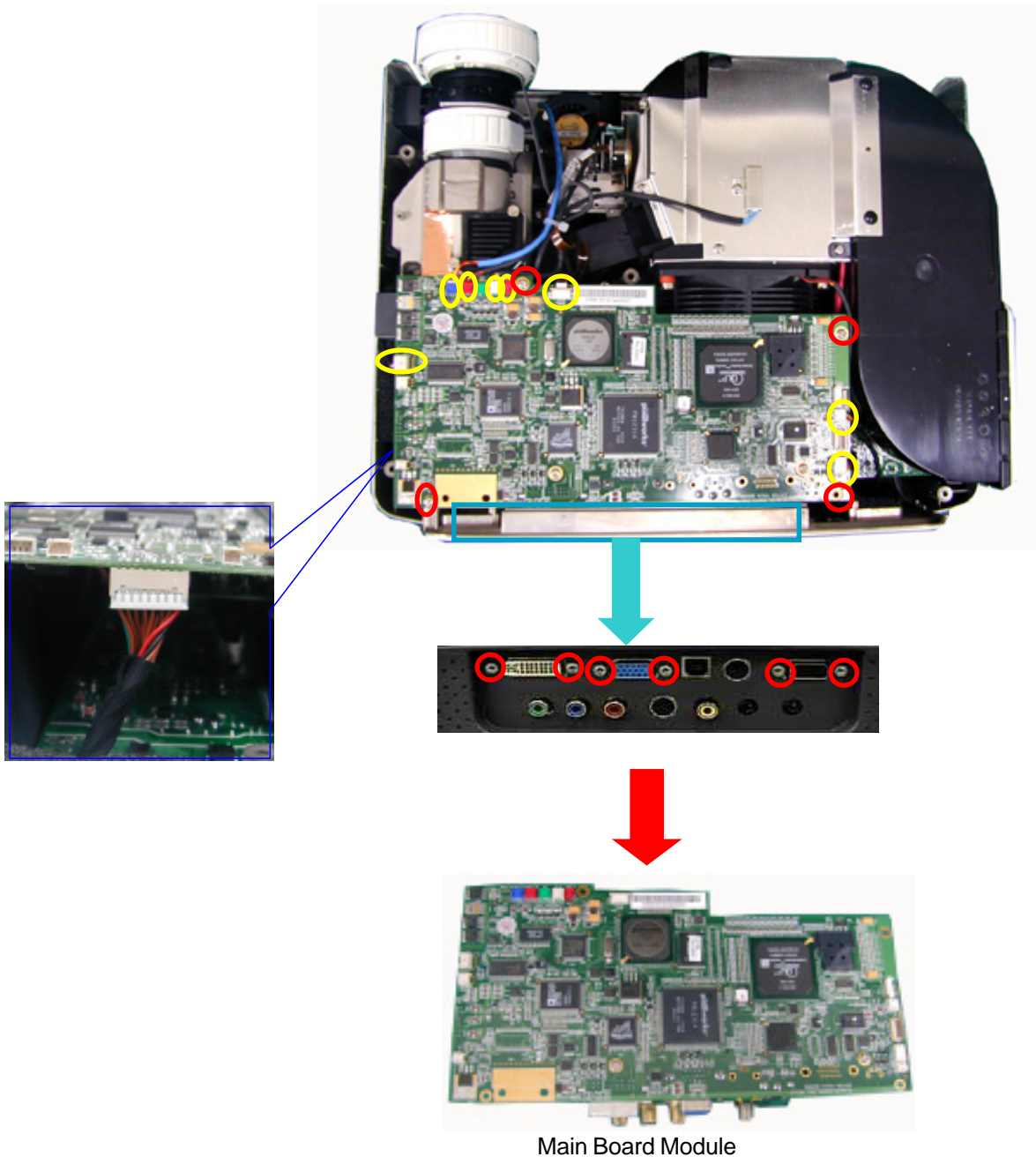
Keypad

Keypad Board

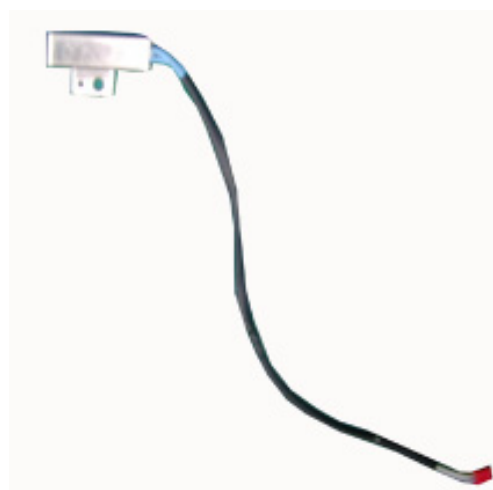
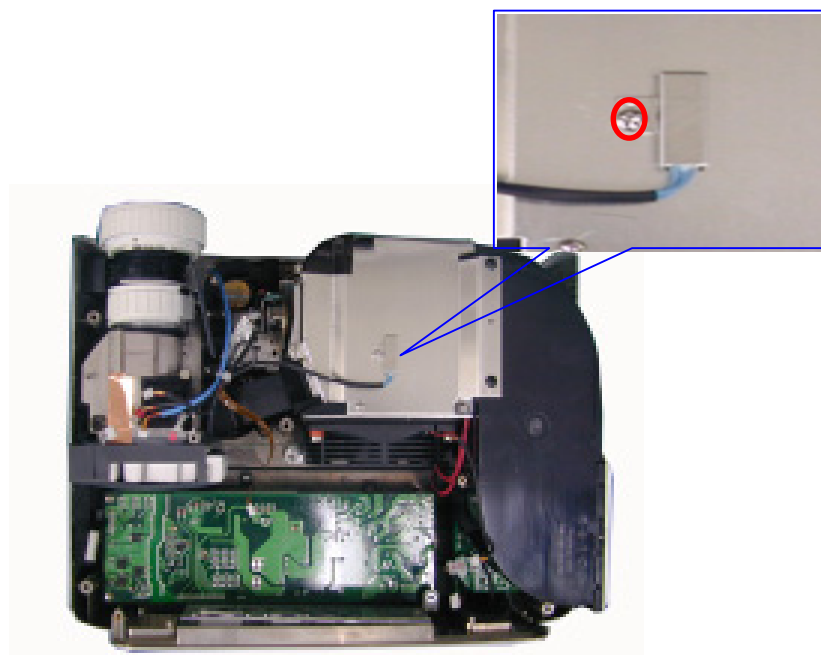
FPC Cable

Disassemble Main Board Module and Thermal Switch

1. Unplug nine connectors and unscrew four screws.
2. Unscrew six hex screws from Rear Cover to remove Main Board.



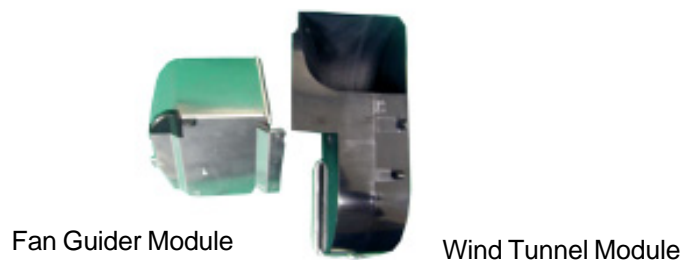
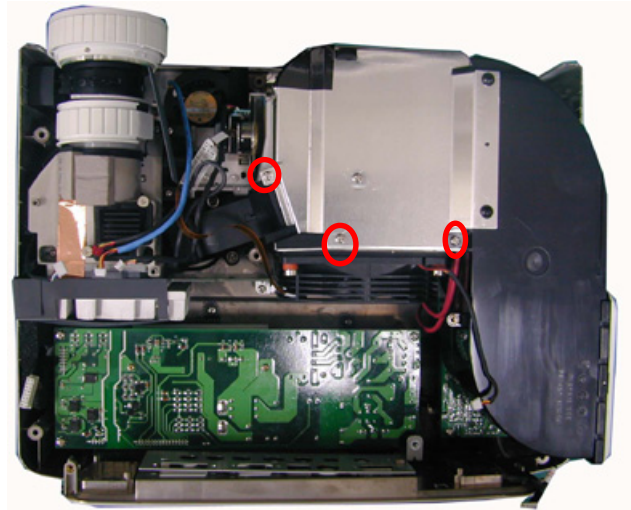
-
3. Unscrew one screw to remove Thermal Switch.



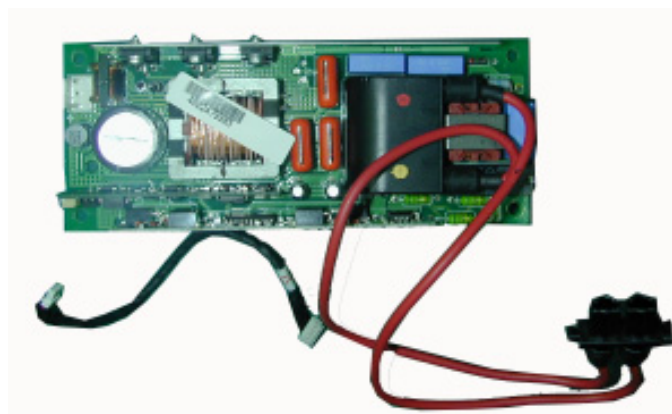
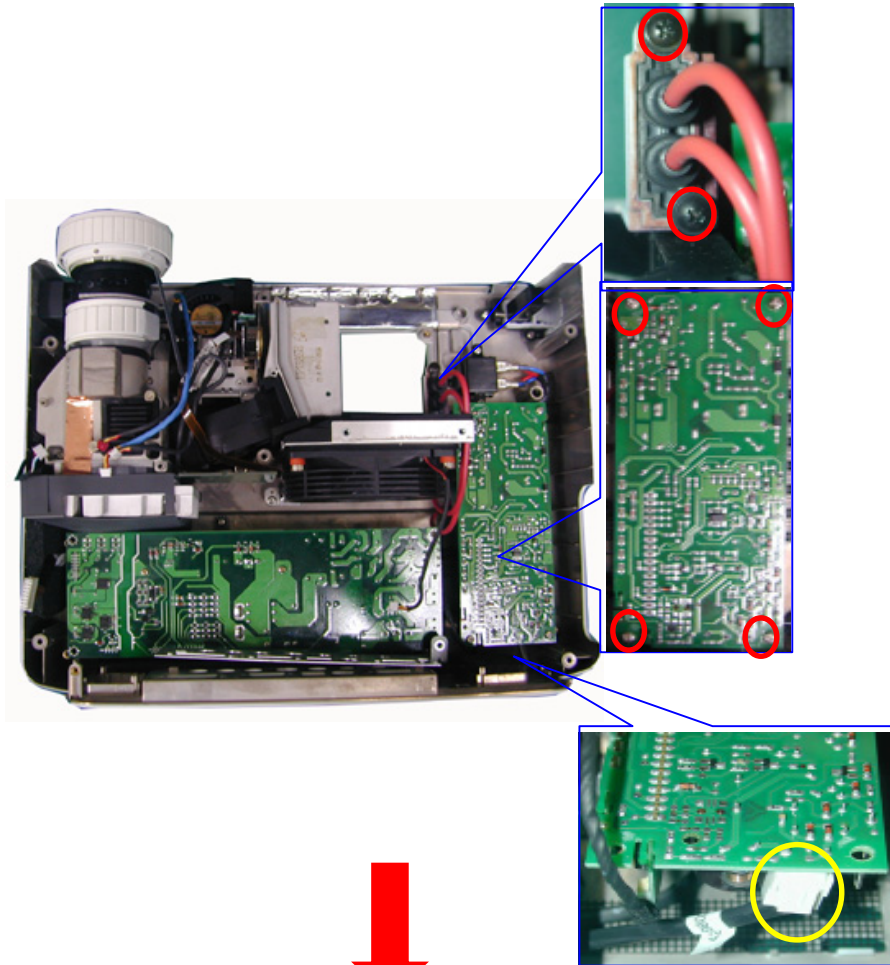
Thermal Switch

Disassemble Fan Guider Module, Wind Tunnel Module, Lamp Driver Module, LVPS and Interrupt Switch Module

1. Unscrew three screws to separate Fan Guider Module and Wind Tunnel Module from Bottom Housing.
2. Unscrew two screws from Wind Tunnel Module to remove Fan Guider Module.

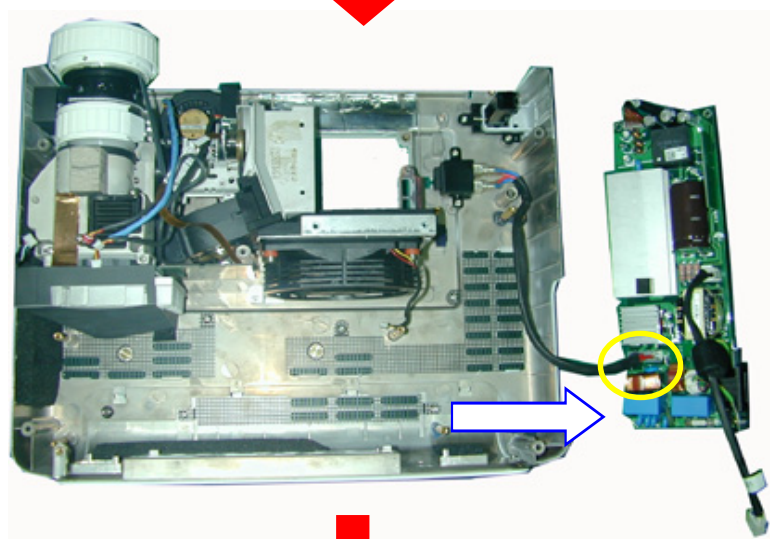
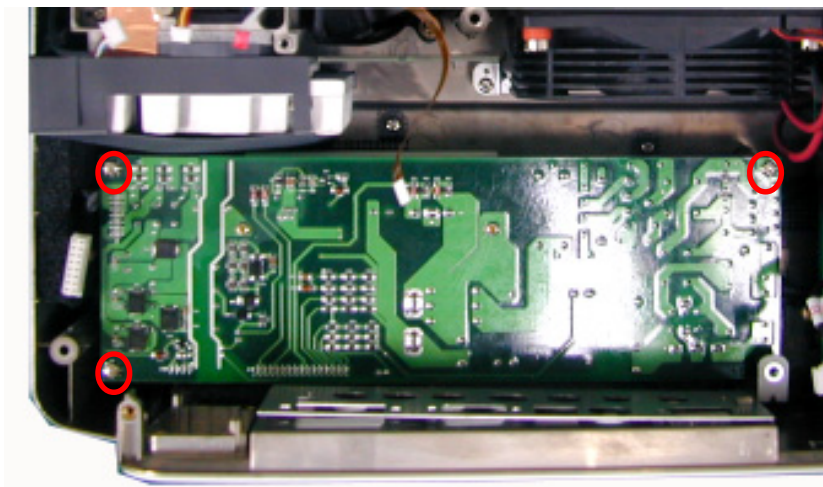


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3. Unscrew six screws, unplug one wire and one connector to remove Lamp Driver Module.

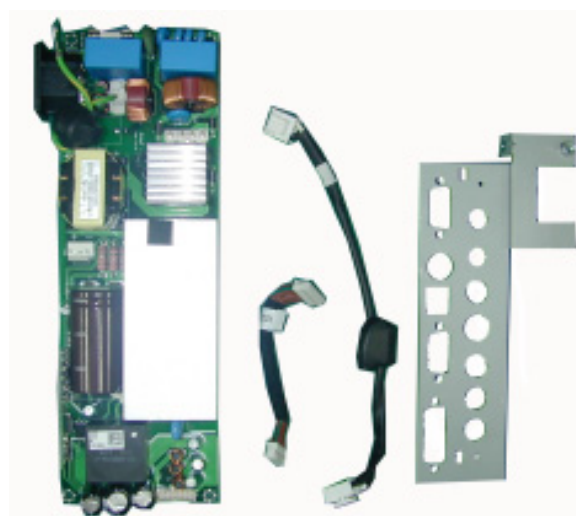
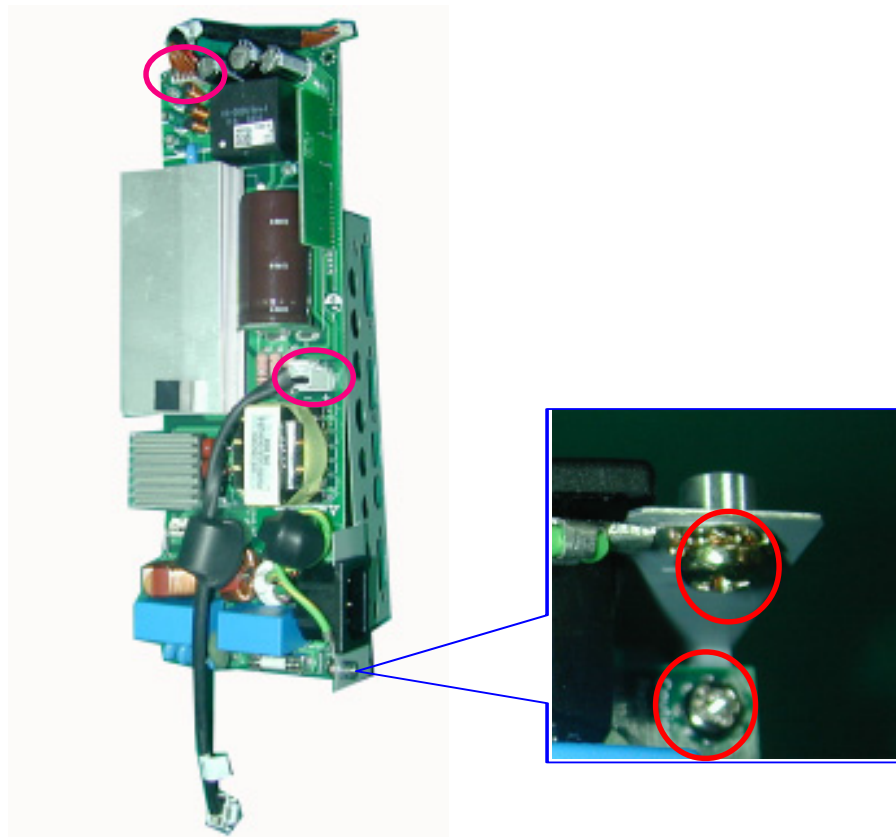


Lamp Driver Module

-
4. Unscrew three screws and unplug one wire to remove LVPS.



-
5. Unscrew two screws to remove EMI Ground Plate and separate the cables.

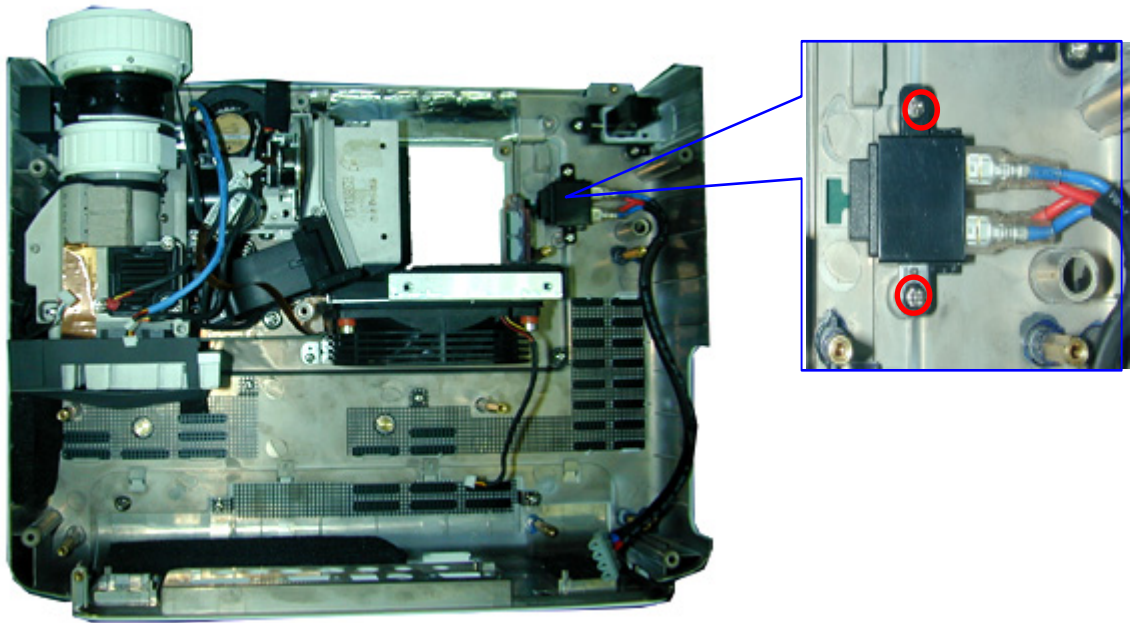


LVPS

Cables

EMI Ground Plate

-
6. Unscrew two screws to remove Interrupt Switch Module.



Interrupt Switch Module

Disassemble Color Wheel Module, Axial Fan 90x25 Module, Lamp Fan 60x60x25 and Optical Engine Module

1. Unscrew two screws to remove Color Wheel Module.

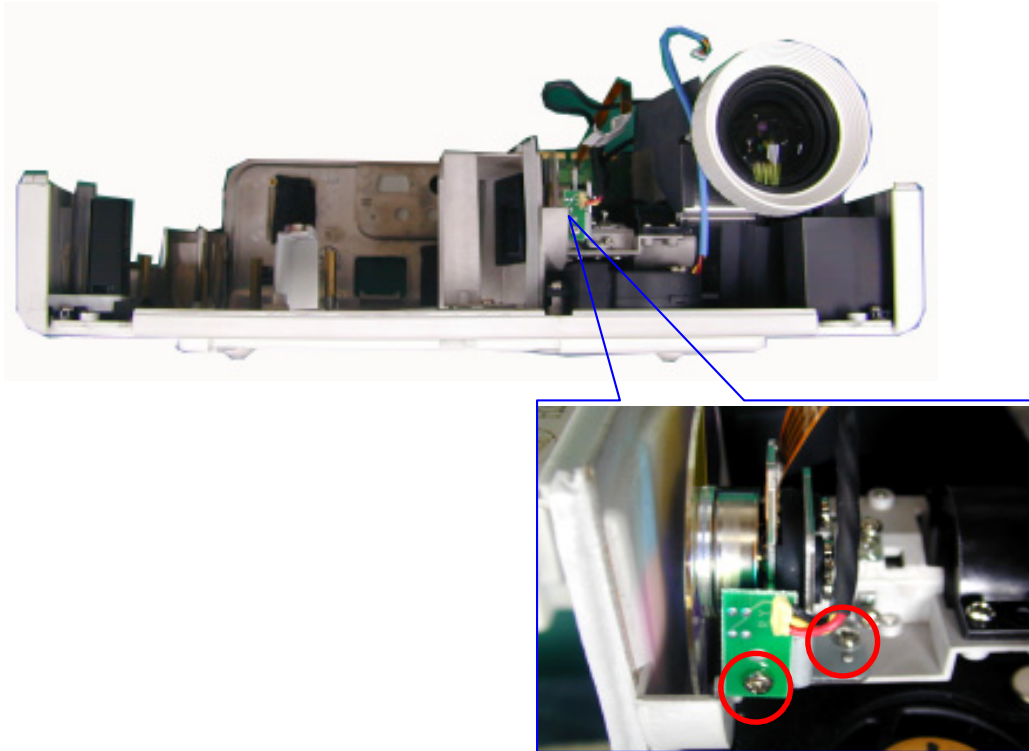
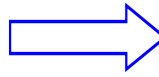
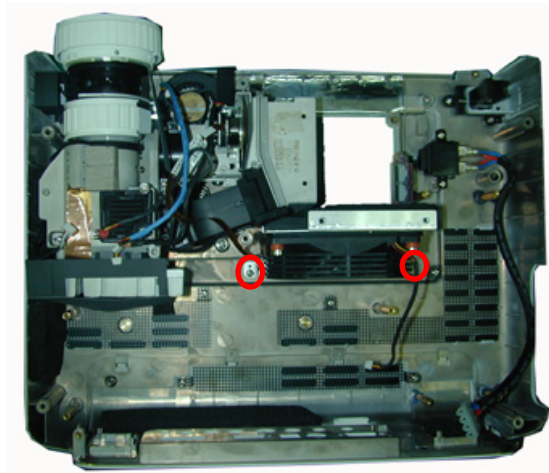


Photo Sensor Module Color Wheel

-
2. Unscrew two screws to remove Axial Fan 90x25 Module.

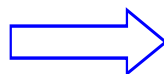
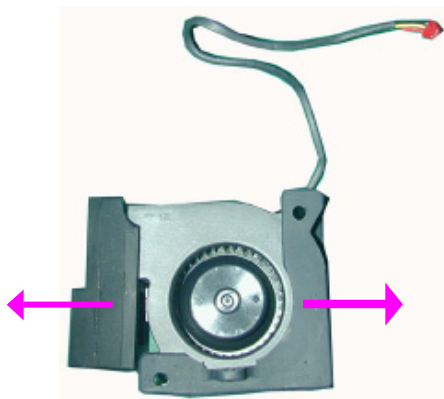
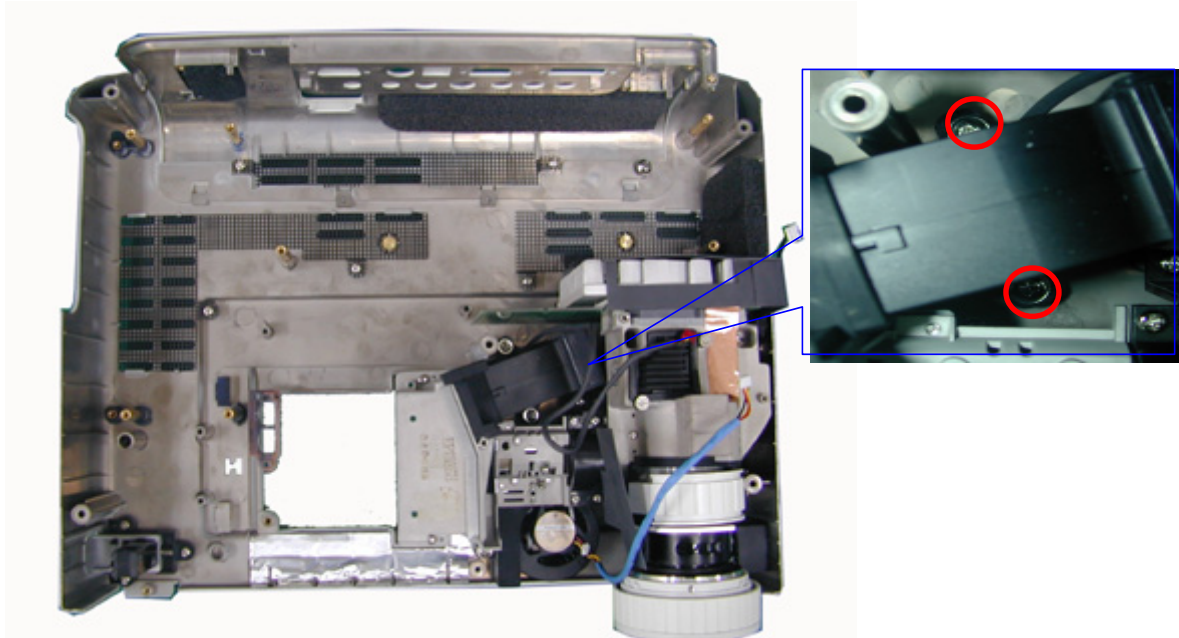


Steamtight rubber

Axial Fan 90x25

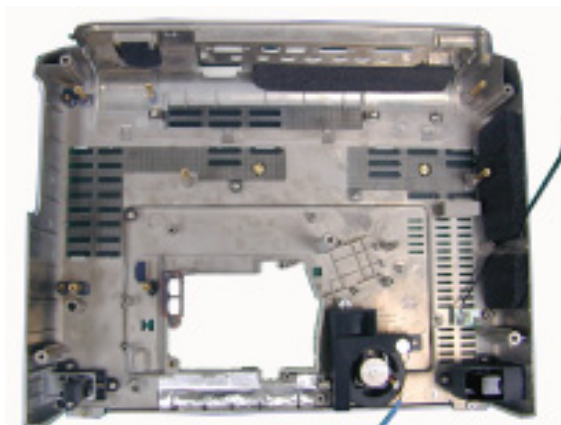
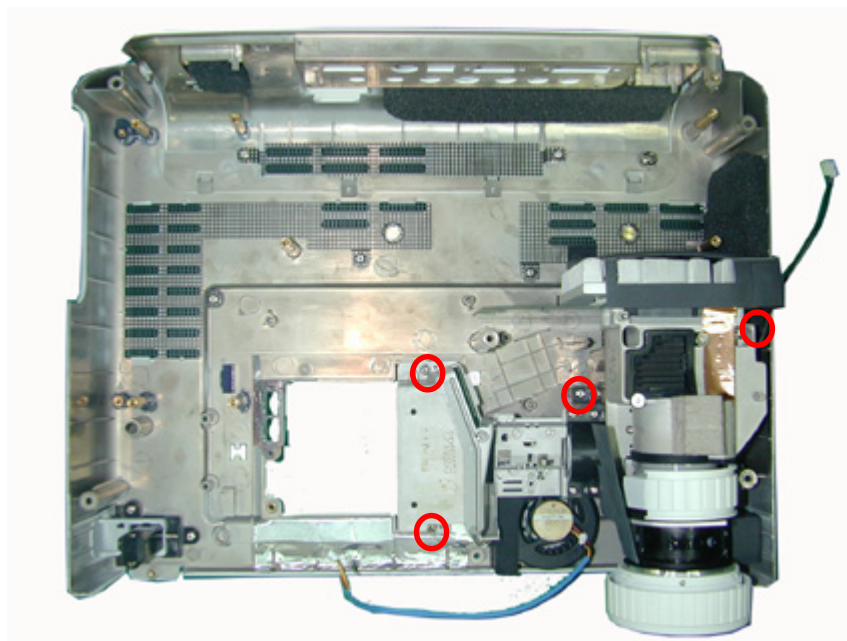
Holder Bracket and Rubber Bottom

-
3. Unscrew two screws to remove 60x60x25 Lamp Fan.
 4. Pull two side outward to disassemble 60x60x25 Lamp Fan.



60x60x25 Lamp fan

-
5. Unscrew four screws to remove Engine Module from Bottom Cover.



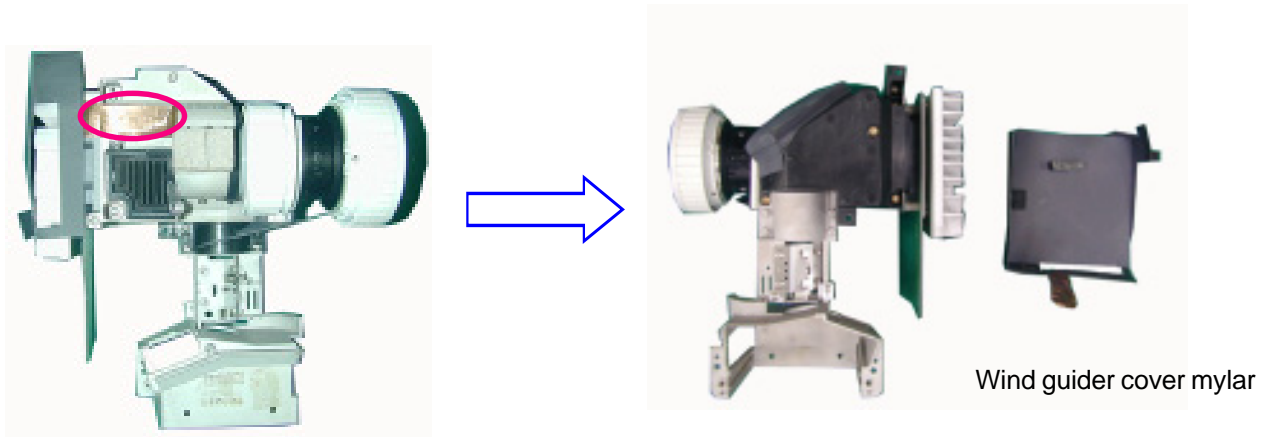
Bottom Cover



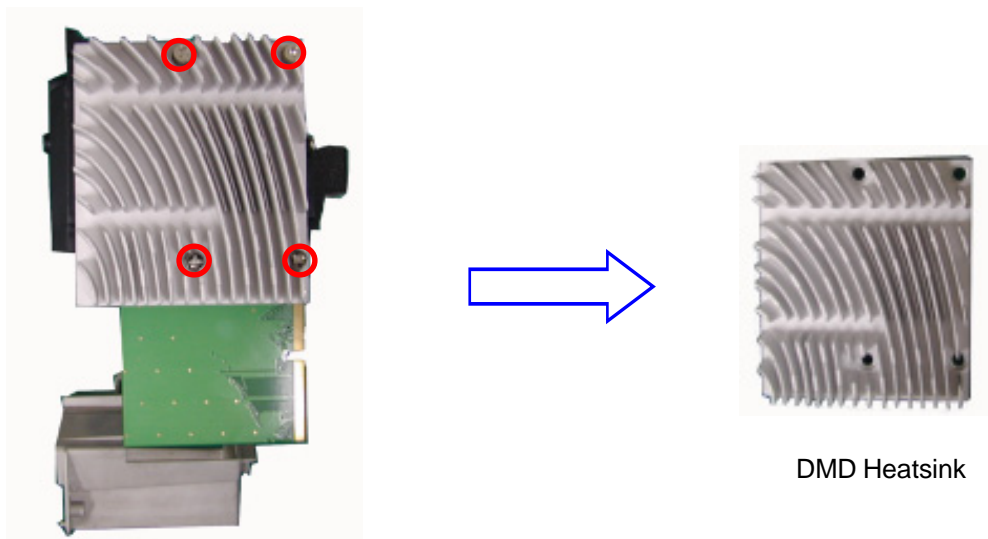
Optical Engine Module

For PD723 Use only :

6. Tear off EMI tape to separate Wind Guider Cover Mylar from Engine Module.



7. Unscrew four screws to remove DMD Heatsink.



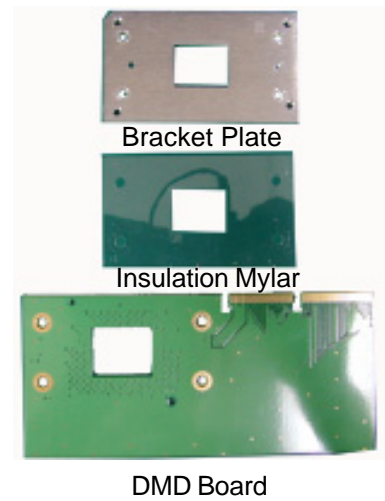
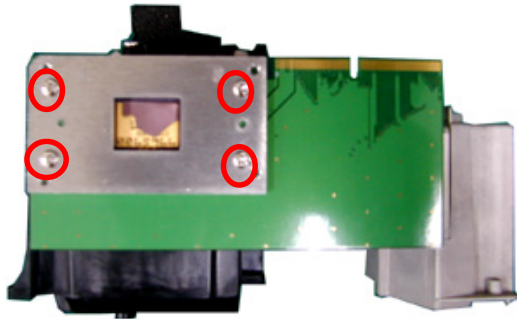
For PD725 Use only :

7. Unscrew four screws to remove DMD Heatsink Module.
Unscrew four screws to remove DMD Heatsink Cover.
Unscrew three screws to separate 45x45x9 Dish Fan from DMD Heatsink AL.

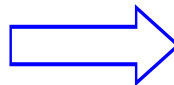


Disassemble DMD Board and DMD CHIP

1. Unscrew four screws to remove Bracket Plate, Insulation Mylar, DMD Board.



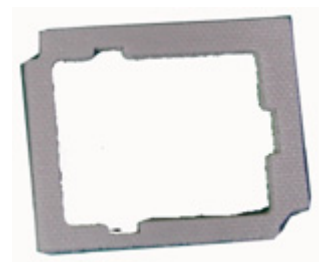
2. Separate DMD chip from Engine Module.



DMD Socket

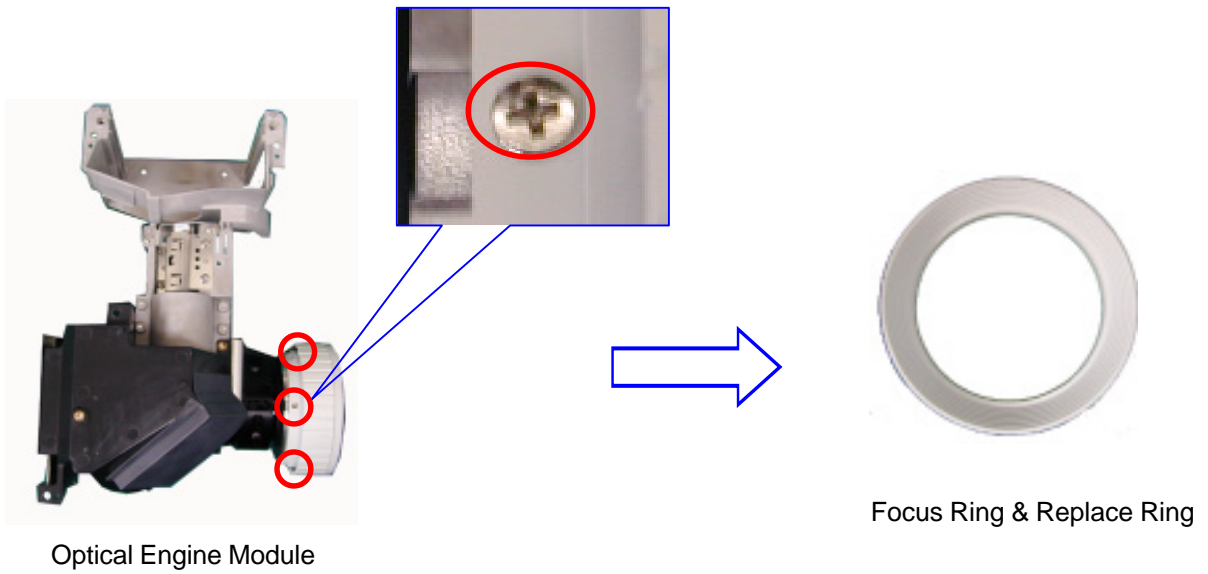


DMD Chip



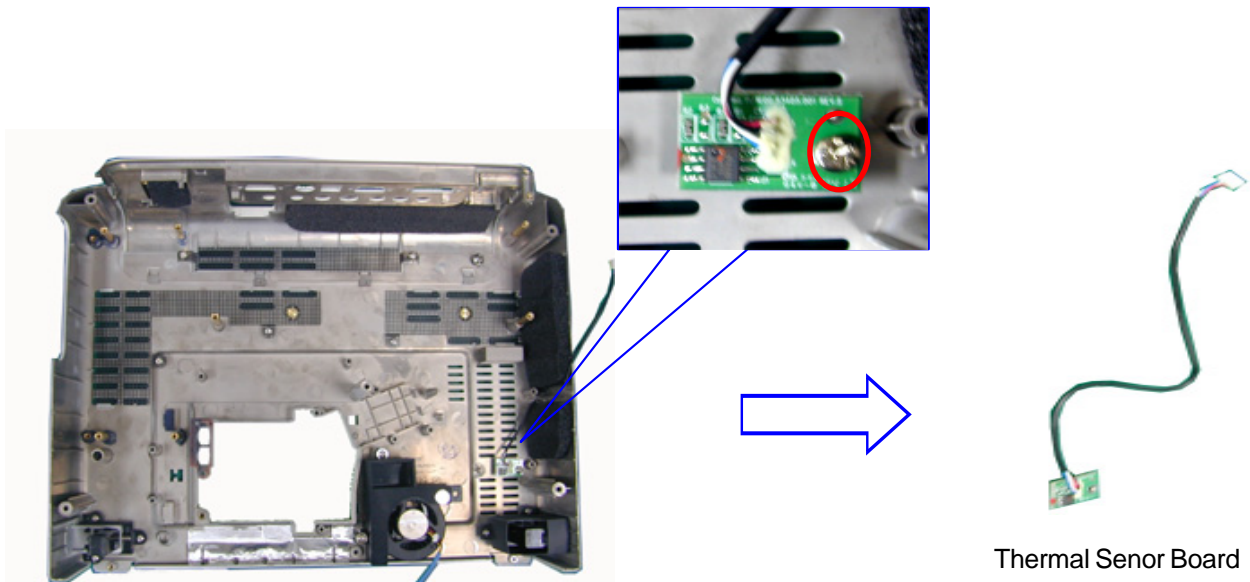
DMD Seal rubber

-
3. Unscrew three screws to remove Focus Ring & Replace Ring.

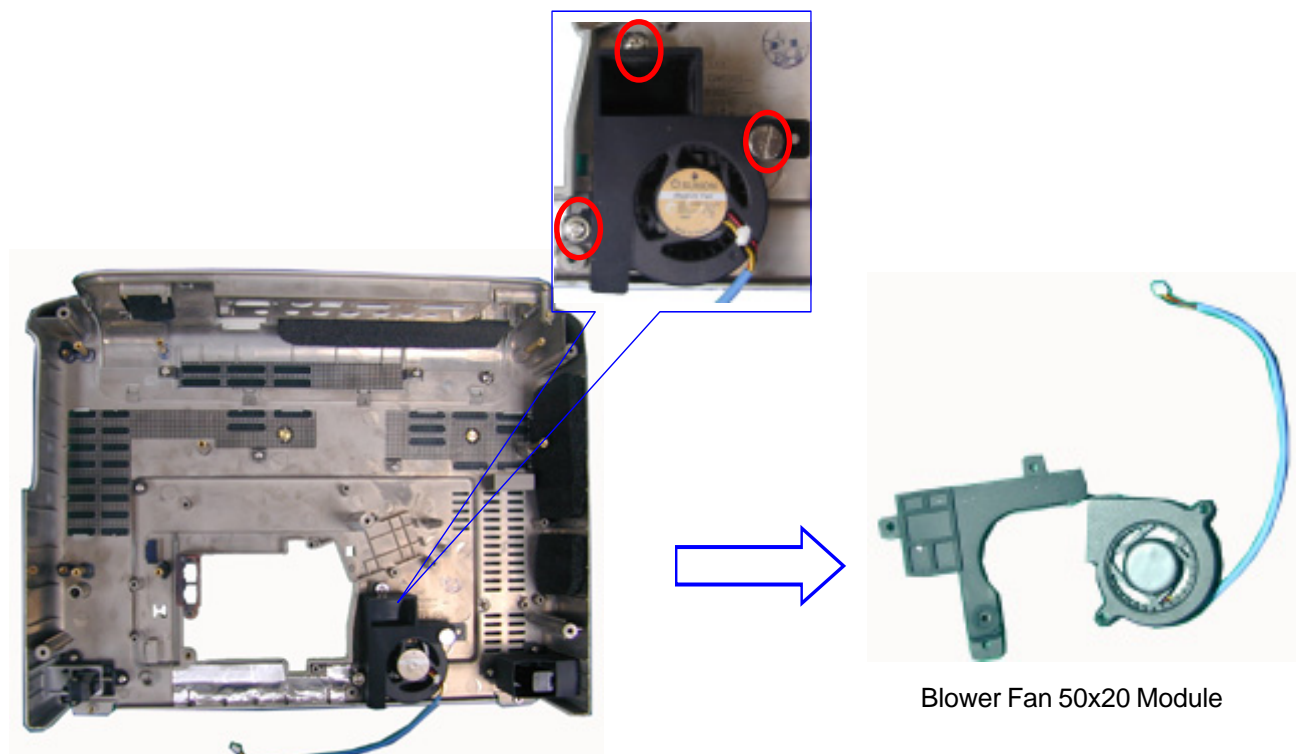


Disassemble Blower Fan 50x20, Thermal Sensor Board, Interrupt Switch Module, Bottom Cover and Rear Cover

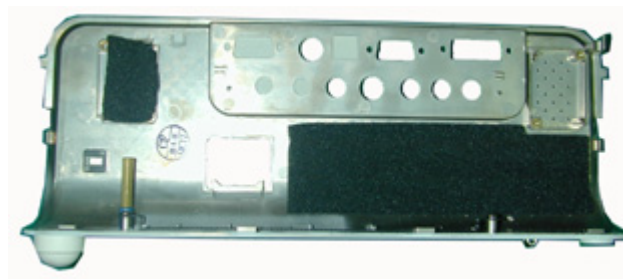
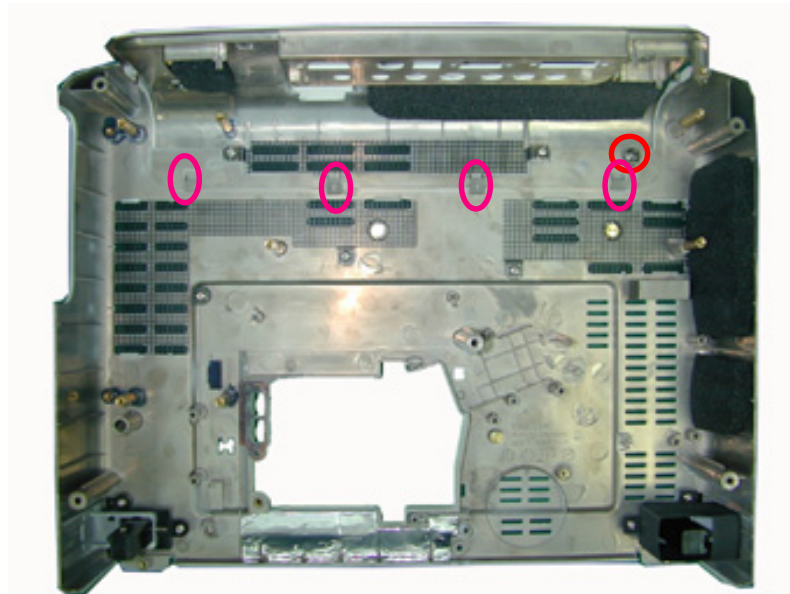
1. Unscrew one screw to remove Thermal Sensor Board.



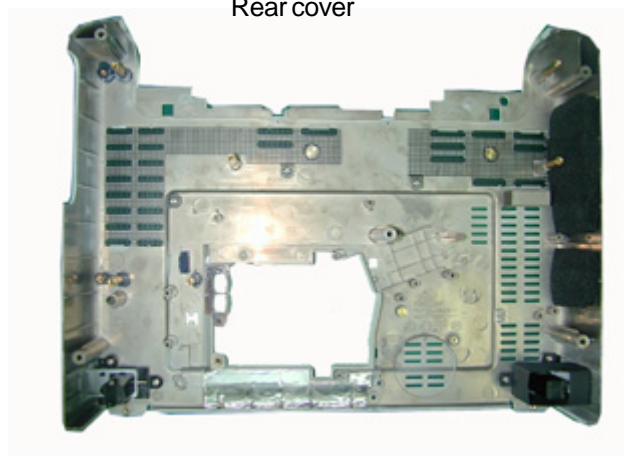
2. Unscrew three screws to remove Blower Fan 50x20 Module.



-
3. Unscrew one screw and separate Rear Cover from Bottom Cover by pressing four tenons.

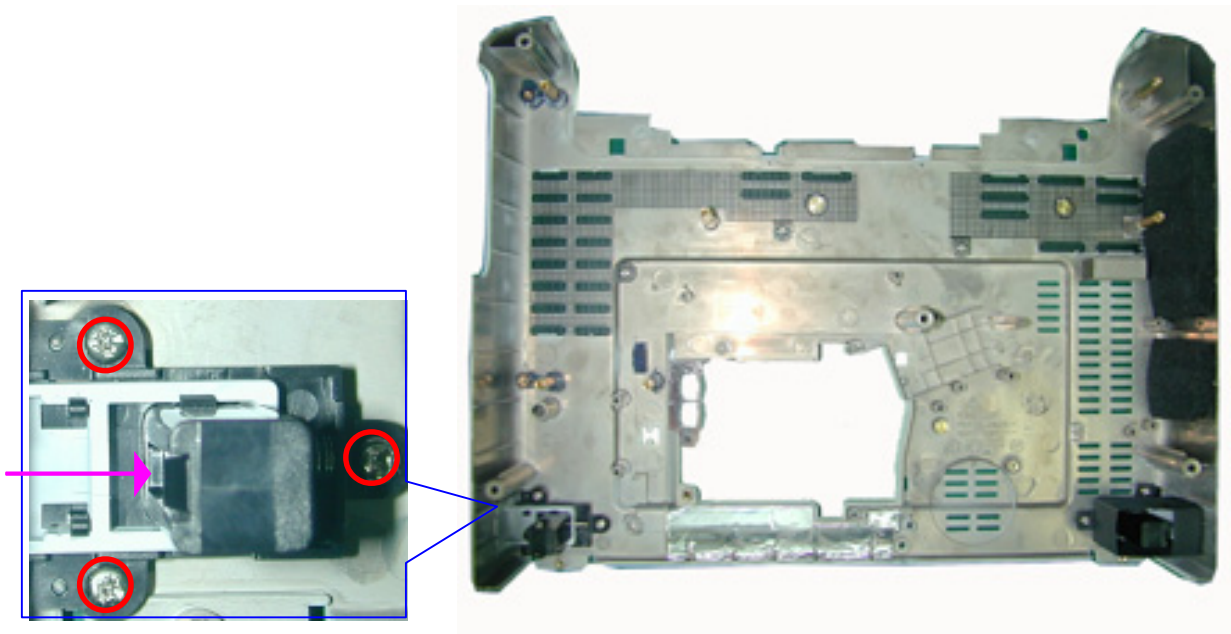


Rear cover



Bottom Cover

-
4. Unscrew three screws and press the tenon to remove Elevator Module.



Elevator Module

Troubleshooting

This chapter provides technicians and people who have an electronic background a primary description about maintaining the product. Moreover, you can get the appropriate operation to solve some complicated problems of component repairing and professional problems.

The Troubleshooting section focus on the following precedures:

1. Power Troubleshooting
2. Performance Troubleshooting (Computer Signal)
3. Performance Troubleshooting (Video Signal)
4. Function Troubleshooting
5. Audio Troubleshooting
6. Remote Control Troubleshooting

Equipment Needed

Item
PD723 / 725 Projector
VESA VGA Cable / VESA DVI to DVI Cable
PC (Personal Computer) with analog and digital signal output
DVD Player for Video Signal and Audio Signal
PD723 / 725 Remote Control

Main Procedure

Power Troubleshooting

- A. Is LED Indicator OK?
 - Check the Power cord and AC power outlet.
 - Check the Keypad cable has broken or not.
 - Check if all the wires are well connected inside.
 - Check the Ballast.
 - Check the Main board.
 - Check the Keypad board.

- B. Is Fan Working After Press Power/Standby Button?
 - Check the Keypad cable has broken or not.
 - Check if fan wire is well connected.
 - Check the Thermal board.
 - Check the Main board.
 - Check the Fan.

- C. Is Lamp Lit?
 - Check the Lamp cover assembly OK or not.
 - Check they have the sound of Lamp ignitor output from Unit or not.
 - Check the Cable of interrupt switch.
 - Check the DMD board.
 - Check the Lamp module.
 - Check the Ballast.

Performance Troubleshooting (Computer Signal)

- A. Have Image?
 - Ensure the Signal cable and Source work as well.
 - Check that can OSD Menu show on the screen.
 - Check the Main board.
 - Check the DMD board.

- B. Have Garbage Pattern?
 - Ensure the Signal cable and Source work as well.
 - Check the Main board.
 - Check the DMD board.

- C. Uniformity OK?
 - Ensure the Projection screen without dirty.
 - Ensure the Projection lens is clean.
 - Ensure the Brightness is within spec.
(Replace the Lamp if the Brightness is less than spec.)
 - Check the Optical engine.

- D. Is Color OK?
 - Ensure the Signal cable works as well.
 - Check the “Color wheel index” in the service mode of OSD Menu. (*Note)
 - Check the Photo sensor.
 - Check the Main board.
 - Check the DMD board.

- E. Dot Defect isn't Compliant with the Spec.
 - Ensure the Projection lens is clean.
 - Use the Air gun for the Optical engine clean.
 - Check the DMD chip.

- F. Have Noise?
 - Ensure the Signal cable and Source is work as well.
 - Adjust the Tracking selection in OSD Menu.
 - Press the Menu button to check that have the noise issue appear on OSD Menu.
(Check the DMD board if the noise also appear on the OSD Menu.)

G. Have Line Bar?

- Adjust the frequency selection in OSD Menu.
- Press the Menu button to check that have Line bar show on the OSD Menu. (Check the DMD chip and DMD board. If the Line bar also show on the OSD Menu)
- Ensure that there is no dust on the DMD Contact housing module.
- Re-assembly for DMD module.
- Check the Main board.

H. Have Noise?

- Ensure the Signal cable and Source is work as well.
- Adjust the Tracking selection in OSD Menu.
- Press the Menu button to check that have the noise issue appear on OSD Menu. (Check the DMD board if the noise also appear on the OSD Menu.)

*Note : The procedure to enter service mode is..
Press "Power", "Up", "Down", "Right" button when the Unit under search status.

Performance Troubleshooting (Video Signal)

A. Have Image?

- Ensure the signal cable and source work as well.
- Check that can OSD menu show on the screen.
(Check the main board if OSD menu cannot show on the screen)

B. Have Garbage Pattern?

- Ensure the signal cable and source work as well.
- Check that can OSD menu show on the screen.
(Check the main board if OSD cannot show on the screen)

C. Is Color OK?

- Do the “Factory Reset” of the engineering mode.
- Ensure the signal cable work as well.
- Check the color temperature setting of OSD menu.
(Check the main board if the setting of color temperature is under default)
- Check the color setting of OSD menu. Ex : “Saturation”, “Tint” and “Sharpness” setting of OSD menu.

D. Is Image Flicker?

- Ensure the signal cable work as well.
(Please check the length of cable; the signal will be reduce when the signal cable is longer than 5m)
- Do the “Factory Reset” of the engineering mode.
(Check the Main board if the image still flicker after the factory reset.)

E. Is There Line Bar Show On The Screen?

- Check that can OSD menu display on the line bar area.
(Check the DMD board if the OSD menu cannot display on the line bar area.)
(Check the Main Board if the OSD menu can display on the line bar area)

F. Is Image Noise?

- Ensure the signal cable is work as well.
(Check the cable length of cable; the signal will be reduce when the signal cable is longer than 5m)
- Do the “Factory Reset” of the engineering mode.
(Check the Main board if the image still display with noise.)

Function Troubleshooting

A. OSD Does Not Show up.

- Check the Keypad cable and ensure there is no broken issue on the cable.
- Use Keypad to test again.
(Replace the Keypad board if the Unit works fine with the new Keypad board.)
- Use the Remote control for the OSD function test.
(Check the Keypad board and Keypad cable if the Remote control works as well)
- Check the Main board.

B. Function Cannot Be Adjust.

- Check the Keypad cable and ensure there is no broken issue on the cable.
- Use Keypad to test again.
(Replace the Keypad board if the Unit works fine with the new Keypad board.)
- Use the Remote control for the OSD function Adjustment test.
(Check the Keypad board and Keypad cable if the Remote control works as well)
- Check the Main board.

Audio Troubleshooting

A. No Sound Output.

- Ensure the Signal cable and Source are work fine.
- Use the new Speaker for the Sound output test.
(Replace the Speaker if the new Speaker works fine with the Unit.)
- Check the Speaker wire that has broken issue or not.
- Check the Main board.

B. Sound Output With Noise.

- Ensure the Signal cable and Source are work fine.
- Ensure the volume has not select to the max selection.
(Due to the output power of internal Speaker is 2W only.
It might has the noise issue if the volume select to the max.)
- Use the new Speaker for the test.
(Replace the Speaker if the new Speaker works fine with the Unit.)
- Check the Speaker wire that has broken issue or not.
- Check the Main board.

Remote Control Troubleshooting

- A. Remote Controller No Function.
- Check the Laser function of Remote controller.
(Replace the battery if there is no Laser output from the Remote controller.)
 - Use a known Remote controller for the function test.
(Replace the Remote controller if the new Remote controller works fine with the Unit.)
 - Check the Main board if the Unit works fine with a known good Remote controller.

Function Test and Alignment Procedure

Equipment Needed

Item	Description
1	IBM PC with XGA resolution (Color Video Signal & Pattern Generator)
2	DVD player with component video (Y, Pb, Pr) and Multi-system (NTSC / PAL / SECAM)
3	HDTV Tuner or Source (480i/p, 576i/p, 720p, 1080i)
4	Minolta CL-100
5	Quantum Date 802B or Chorma 2327

Test Condition

Item	Description
1	Circumstance Brightness : 1.) Dark room less than 10 lux for functional inspection. 2.) Circumstance brightness over than 500 lux for external inspection.
2	Inspection Distance : 1.) About 2.25m for functional inspection (The prosection distance has to base on the screen size till 60 inches) 2.) 30cm for external inspection.
3	Screen Size : 60 inches diagonal (wide)
4	Each PD723/725 should be run-in for 2 hours after repair.
5	Each PD723/725 should be cooling for 5 minutes after the run-in test.
6	Before function test and alignment, each PD723/725 should be warmed up for 5 minutes. 1.) In room temperature 2.) With cycled display colors (R,G,B,White) *Note
7	Test Display Mode & Pattern
8	Function Test and Alignment Procedure

* Note :

- Please enter “Service Mode” to select burn-in function. (For cycled display color mode)
- The procedure for enter service mode.

Press “Power”, “Up”, “Down”, “Right” button when unit is showing “search the signal” image.

Test Display Modes and Patterns

Compatible Modes

Analog :

Compatibility	Resolution	V-Sync(Hz)	H-Sync(KHz)
VGA	640 x 350	70	31.5
VGA	640 x 350	85	37.9
VGA	640 x 400	85	37.9
VGA	640 x 480	60	31.5
VGA	640 x 480	72	37.9
VGA	640 x 480	75	37.5
VGA	640 x 480	85	43.3
VGA	720 x 400	70	31.5
VGA	720 x 400	85	37.9
SVGA	800 x 600	56	35.2
SVGA	800 x 600	60	37.9
SVGA	800 x 600	72	48.1
SVGA	800 x 600	75	46.9
SVGA	800 x 600	85	53.7
XGA	1024 x 768	60	48.4
XGA	1024 x 768	43.4	35.5
XGA	1024 x 768	60	48.4
XGA	1024 x 768	70	56.5
XGA	1024 x 768	75	60.0
XGA	1024 x 768	85	68.7
SXGA	1152 x 864	70	63.8
SXGA	1152 x 864	70	63.8
SXGA	1152 x 864	75	67.5
SXGA	1152 x 864	85	77.1
SXGA	1280 x 1024	60	63.98
SXGA	1280 x 1024	75	79.98
SXGA	1280 x 1024	85	91.1
SXGA+	1400 x 1050	60	63.98
UXGA	1600 x 1200	60	75
MAC LC 13"	640 x 480	66.66	34.98
MAC II 13"	640 x 480	66.68	35
MAC 16"	832 x 624	74.55	49.725

Analog :

Compatibility	Resolution	V-Sync(Hz)	H-Sync(KHz)
MAC 19"	1024 x 768	75	60.24
MAC	1152 x 870	75.06	68.68
MAC G4	640 x 480	60	31.35
MAC G4	640 x 480	120	68.03
MAC G4	1024 x 768	120	97.09
i MAC DV	640 x 480	117	60
i MAC DV	800 x 600	95	60
i MAC DV	1024 x 768	75	60
i MAC DV	1152 x 870	75	68.49
i MAC DV	1280 x 960	75	75
i MAC DV	1280 x 1024	85	91.1

Digital :

Compatibility	Resolution	V-Sync(Hz)	H-Sync(KHz)
VGA	640 x 350	70	31.5
VGA	640 x 350	85	37.9
VGA	640 x 400	85	37.9
VGA	640 x 480	60	31.5
VGA	640 x 480	72	37.9
VGA	640 x 480	75	37.5
VGA	640 x 480	85	43.3
VGA	720 x 400	70	31.5
VGA	720 x 400	85	37.9
SVGA	800 x 600	56	35.2
SVGA	800 x 600	60	37.9
SVGA	800 x 600	72	48.1
SVGA	800 x 600	75	46.9
SVGA	800 x 600	85	53.7
XGA	1024 x 768	60	48.4
XGA	1024 x 768	70	56.5
XGA	1024 x 768	75	60.0
XGA	1024 x 768	85	68.7
SXGA	1152 x 864	70	63.8
SXGA	1152 x 864	75	67.5
SXGA	1152 x 864	85	77.1
SXGA	1280 x 1024	60	63.98
SXGA	1280 x 1024	75	79.98
SXGA	1280 x 1024	85	91.1
SXGA+	1400 x 1050	60	63.98
UXGA	1600 x 1200	60	75

Function Test Display Pattern

- PC Signal

Item	Test Content	Pattern	Specification	Remark
1	Frequency & Tracking	Fine Line Moire	Eliminate visual wavy noise by Rsync, Frequency or Tracking selection.	Figure 1
2	Contrast/Brightness	32 Gray Scale / 64 RGBW scale	Gray level should be distinguishable and without color abnormal issue.	Figure 2,3
3	R, G, B and White Color Performance	R, G, B and White Color	Each R, G, B color should be normal without color abnormal issue.	Figure 4~7
4	Screen Uniformity	Full White	Should be compliant with 65%.(Minimum)	Figure 7
5	Dead Pixel (Bright pixel)	Full Black	Cannot accept any bright pixel	Figure 8
	Dead Pixel (Dark pixel)	Full White	The numbers of dead pixel should be smaller or amount to 6 pixel.	Figure 7
6	Blemish (Bright)	Full Black / Gray 30	The dark blemish cannot be accept if the problem appear with Blue 60 pattern.	Figure 8, 9
7	Blemish (Dark)	Full white / Blue 60	The dark blemish cannot be accept if the problem appear with Blue 60 pattern.	Figure 7, 10
8	Focus	Text Pattern	The test in the corner should be clear after adjust the focus ring.	Figure 11
9	Boundary	Boundary Frame	Horz. And Vert. position of video should be adjustable to be the screen frame.	Figure 12



Figure 1. Fine Line Moire

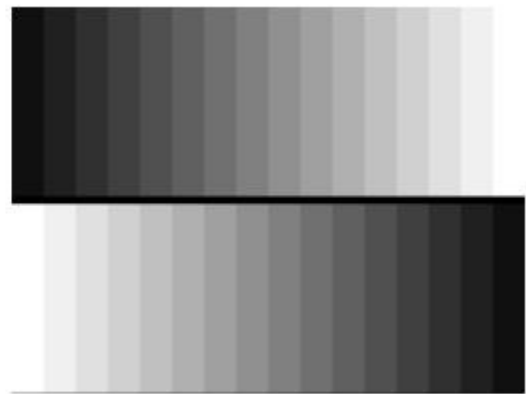


Figure 2. 32 Gray Scale

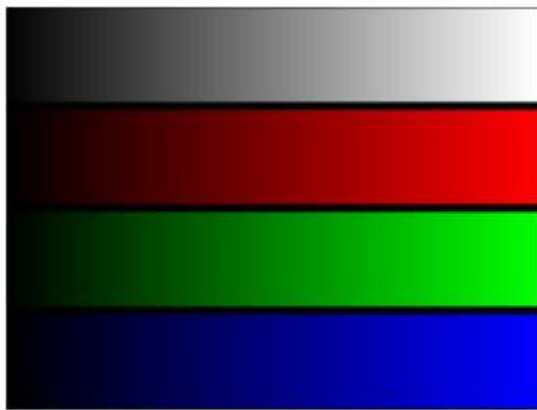


Figure 3. 64 RGBW Scale



Figure 4. Red Pattern



Figure 5. Green Pattern



Figure 6. Blue Pattern



Figure 7. Full White



Figure 8. Full Black



Figure 9. Gray 30 Pattern



Figure 10. Blue 60 Pattern

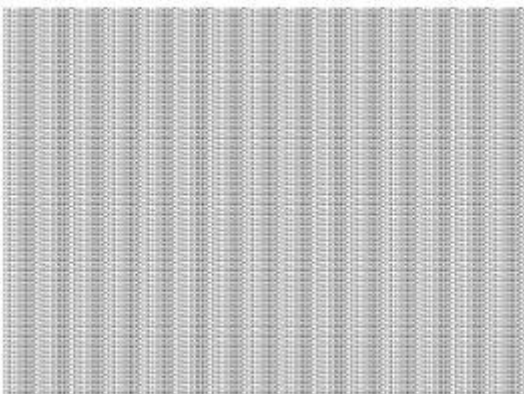


Figure 11. Text Pattern

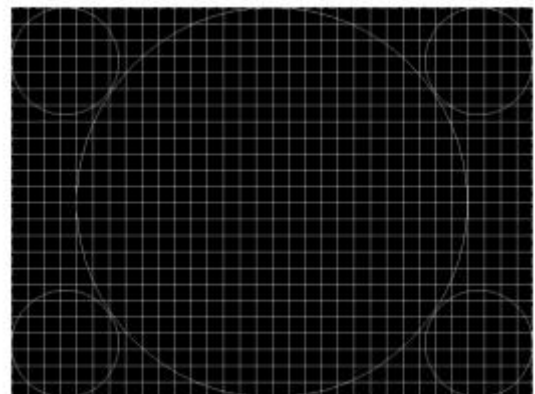


Figure 12. Boundary Frame

Video & Audio Signal

Item	Test Content	Specification
1	Composite Video	The input signal has to display without color abnormal.
2	S-Video	The input signal has to display without color abnormal
3	Component Video	The input signal has to display without color abnormal.
4	HDTV	The input signal has to display without color abnormal.
5	Audio	The audio should be output without noise. The audio selection of OSD should be functionally.

Inspection Procedure

No.	Item	Description
1	Elevator Function	1.) Please check and ensure the function of elevator is work as well. 2.) If not, please return the unit to repair area.
2	Keypad Function (Including Remote Control)	1.) Please check and ensure the control function of keypad is work as well. 2.) If not, please return the unit to repair area.
3	Clock and Clock phase	- Test Signal:1024 x 768 @ 75Hz - Test Pattern:Fine Line Moire Pattern 1.) Check and see If image sharpness and focus in well performed. 2.) If not, readjust by following steps. (a) Enter Image-I, and then select Frequency function to adjust the total pixel number of pixel clock in one line period. (b) Then select phase function and use right or left button to adjust the value to minimize video flicker.
4	R, G, B and white color contrast	- Test Signal:1024 x 768 @ 75Hz - Test Pattern:64 RGBW scale pattern 1.) Please check and ensure if each color is normal and distinguishable. 2.) If not, please return the unit to repair area.
5	Screen Uniformity	- Test Signal:1024 x 768 @ 75Hz - Test Pattern:Full white pattern 1.) Please check and ensure the unit is under the spec. (60% Minimum) 2.) If not, please return the unit to repair area.
6	Dead pixel (Bright pixel)	- Test Signal:1024 x 768 @ 75Hz - Test Pattern:Full black pattern 1.) Please check and ensure the unit is under the spec. (Cannot accept any bright pixel) 2.) If not, please return the unit to repair area.
7	Dead pixel (Dark pixel)	- Test Signal:1024 x 768 @ 75Hz - Test Pattern:Full white pattern 1.) Please check and ensure the unit is under the spec. (Pixel number should be smaller or amount to 6 pixels) 2.) If not, please return the unit to repair area.

No.	Item	Description
8	Blemish (Bright)	<ul style="list-style-type: none"> - Test Signal:1024 x 768 @ 75Hz - Test Pattern:Full black and Gray 30 patterns 1.) Please check and ensure the unit is under the spec. (The bright blemish should not be able to see under Gray 30 pattern) 2.) If not, please return the unit to repair area.
9	Blemish (Dark)	<ul style="list-style-type: none"> - Test Signal:1024 x 768 @ 75Hz - Test Pattern:Full white and Blue 60 patterns 1.) Please check and ensure the unit is under the spec. (The dark blemish should not be able to see under Blue 60 pattern) 2.) If not, please return the unit to repair area.
10	Focus	<ul style="list-style-type: none"> - Test Signal:1024 x 768 @ 75Hz - Test Pattern:Text pattern 1.) Please check and ensure the unit is under the spec. (The text in the corner should be able to see with clear) 2.) If not, please return the unit to repair area.
11	Boundary	<ul style="list-style-type: none"> - Test Signal:1024 x 768 @ 75Hz - Test Pattern:Boundary frame pattern 1.) Please check and ensure the unit is under the spec. (The horizontal and vertical position of image should be adjustable to be the screen frame.) 2.) If not, please return the unit to repair area.
12	Video	<ul style="list-style-type: none"> - Test Signal:Composite video,S-Video and Component video - Test Pattern:NTSC,PAL,SECAM 1.) Please check and ensure the unit can display the video signal without color abnormal or image abnormal issue. 2.) If not, please return the unit to repair area.
13	HDTV	<ul style="list-style-type: none"> - Test Signal:HDTV signal - Test Pattern:480i/p,576i/p,720p,1080i 1.) Please check and ensure the unit can display the HDTV signal without color abnormal or image abnormal issue. 2.) If not, please return the unit to repair area.
14	Audio	1.) Please check and ensure the function of audio is work as well. (Volume,Treble,Bass,Mute) 2.) If not, please return the unit to repair area.
15	Reset All	After final QC step, we have to erase all saved change again and restore the factory defaults. Please select and enter Factory Reset function of Service Mode to ensure the function is work as well. This action will allow you erase all end-users settings and restore the original factory setting.

FRU (Field Replaceable Unit) List

This chapter gives you the FRU (Field Replaceable Unit) listing in global configurations of PD723 & PD 725. Refer to this chapter whenever ordering for parts to repair or for RMA (Return Merchandise Authorization).

IMPORTANT: Please note WHEN ORDERING FRU PARTS, that you should check the most up-to-date information available on your regional web or channel. For whatever reasons a part number change is made, it will not be noted in the printed Service Guide. For ACER-AUTHORIZED SERVICE PROVIDERS, your Acer office may have a DIFFERENT part number code to those given in the FRU list of this printed Service Guide. You MUST use the local FRU list provided by your regional Acer office to order FRU parts for repair and service of customer machines.

IMPORTANT: Please note that Acer Corporation sells only the parts listed in the following table. Please be reminded that though some parts are disassembled in Chapter 3 for demonstration purpose, Acer Corporation does not provide these parts.

NOTE: To scrap or to return the defective parts, you should follow the local government ordinance or regulations on how best to dispose it, or follow the rules set by your regional Acer office on how to return it. You can access to the website for the latest Parts version <http://aicsl.acer.com.tw/spl>

NOTE: Please access to <http://aicsl.acer.com.tw/spl> to get the up-to-date Part information.